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DEVELOPMENT OF AIR FORCE
FLIGHT SAFETY MODELS

Volume 7

A-37

AIRCRAFT

(Includes Documentation for T-37 Model)

October 1975

Prepared for

SERVICE ENGINEERING DIVISION
SAN ANTONIO AIR LOGISTICS CENTER
Kelly Air Force Base, Texas

Under Contract F09603-72-A-1132-SA01

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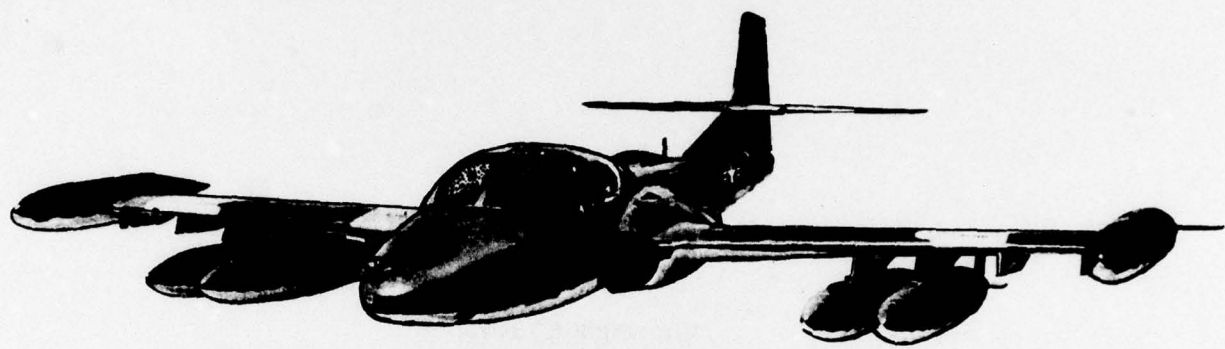
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ABSTRACT

A general description of the Flight Safety Prediction Technique, and the documentation associated with its specific application to both the A-37 and T-37 aircraft, are presented.

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GLOSSARY

This glossary presents general definitions of terms used in this report. The reader will find certain of these terms defined in somewhat different words in the text, depending on the context of the discussion; but the meaning will be consistent with the definitions given here.

- | | |
|----------------------------|--|
| Criticality | - A numerical index of the significance of equipment failure history relative to aircraft safety. As an analysis parameter, it can be considered proportional to the likelihood that an item will fail and thereby cause an accident. It is the product of the failure probability and the sensitivity of an equipment item. |
| Dependency | - See link dependency. |
| FSPT | - Flight Safety Prediction Technique |
| Flight Phases | - Discrete segments of the aircraft mission profile. For present purposes, the flight phases are defined as 1) startup and taxi, 2) takeoff, 3) climb, 4) cruise, 5) tactics, 6) cruise, 7) descend, 8) land, and 9) taxi and shutdown. |
| Functional Analysis | - The determination of equipment relationships to aircraft functions performed, and the interrelationships of these functions. |
| Functional Link | - The simplest form of functional relationship in which one function is dependent upon the next lower function. |
| Functional Path | - The compilation of functional links, in sequence, through which a function is identified as being dependent upon another. |
| Link Dependency | - The conditional probability of a dependent function failing, given that a particular function it is dependent upon has failed. |
| Provisory Condition | - Operation of an aircraft in a mode or environment such that the safety-related importance of certain equipments is increased. Provisory conditions include icing, night flight, supersonic flight, etc. |
| Provisory Factor | - The probability that a provisory condition exists. Also used to describe the coded notation used to indicate that a functional relationship is dependent on a particular provisory condition. |
| Safety Sensitivity | - Same as "sensitivity". |

Sensitivity

- A quantitative indication of the degree of safety degradation to be expected if a function or piece of equipment fails. The more specific terms are "functional sensitivity" or "equipment item sensitivity".

Sensitivity Path

- A particular sequence of functional dependencies (beginning at the top level in the hierarchical structure) through which a function or piece of equipment derives a sensitivity value. Equipment and functional sensitivity values are often derived through several such sensitivity paths.

FOREWORD

This document is part of a 16-volume report describing the application to specific aircraft types of ARINC Research Corporation's Flight Safety Prediction Technique (FSPT). The technique was developed under previous Air Force contracts (see Appendix A). The present effort, undertaken in 1972 under Contract F09603-72-A-1132-SA01, has led to further refinement of the FSPT through its broad application to many different types of aircraft. The flight safety models generated for these aircraft are presented in individual volumes of this report as follows:

<u>Volume</u>	<u>Aircraft</u>	<u>Volume</u>	<u>Aircraft</u>
2	T-38	10	B-52G, H
3	F-111A, FB-111A	11	C-130E
4	A-7D	12	KC-135
5	F-4D, E; and RF-4C	13	C-5A
6	C-141	14	T-39
7	A-37	15	F-15
8	O-2	16	UH-1N Helicopter
9	OV-10		

Volume 16 will document the results of a feasibility study of extending the FSPT to rotary-wing aircraft.

Volume 1, an overall summary of the contractual effort, will be issued at the end of the contract period.

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1

INTRODUCTION

The Flight Safety Prediction Technique developed by ARINC Research Corporation provides for assessment of the impact on flight safety of the failure of specific items of equipment within an aircraft. In the FSPT, mathematical modeling procedures are applied for processing aircraft-equipment failure data to yield a quantified index ranking safety-related problems on the basis of their likelihood of occurrence and the resulting degradation in the aircraft's capability to fly.

The ranking factor is called "criticality", which in its simplest form is the product of the failure probability and flight-safety sensitivity of an equipment. (A more detailed definition appears in Section 2 and Appendix B.) The failure probability inputs are from basic failure-data sources, AFM 66-1 and 65-110. The sensitivity estimates are derived by the following process:

- a. Systematic analysis of aircraft functions to determine those essential to flight safety
- b. Identification of the hardware required to perform these functions
- c. Evaluation of the safety significance of the hardware in performing these essential aircraft functions.

The criticality values resulting from this approach provide a relative ranking of all malfunctions with respect to their safety significance. Figure 1-1 is a simplified example of how three equipment items would be ranked on the combined basis of their failure probability and safety sensitivity. This figure illustrates an example in which item A has the highest failure probability, but due to the low sensitivity value is ranked below item B in criticality.

The methodology has the ability to rank malfunction problems currently and continuously by their accident potential. This ranking, based on criticality assessment, can provide the basic parameters necessary for:

- a. Identifying equipment items whose failure history and application pose a threat to aircraft safety
- b. Quantifying the degree of threat associated with each equipment item
- c. Evaluating and tracking the effectiveness of modifications to the aircraft
- d. Assessing safety benefits versus the cost of proposed aircraft modifications, changes in maintenance or flight operations, or alternative aircraft designs.

In this report, Section 4 and Appendix D pertain specifically to the A-37 aircraft. The remainder of the document provides support information that will make the A-37 data, and the method by which the data were obtained, more meaningful to the general reader.

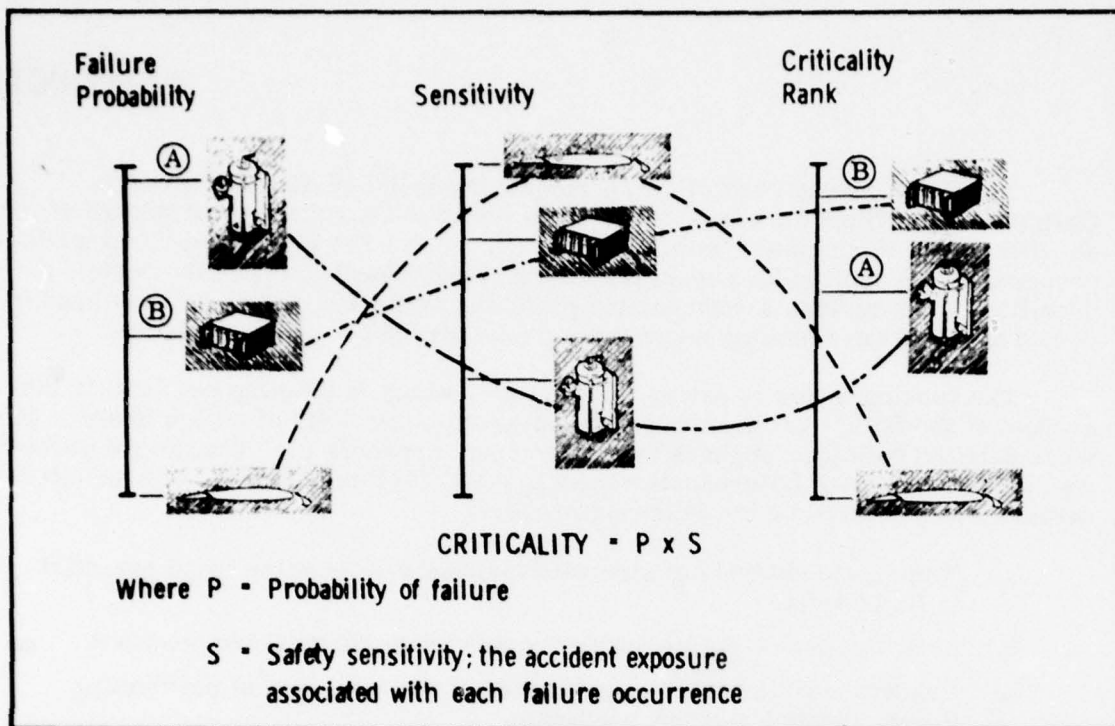


Figure 1-1. Example of Criticality Ranking Process

Section 2 presents an overview of the development and utilization of the Flight Safety Prediction Technique; Section 3 discusses the steps associated with generating a safety model for calculating the safety criticality of various equipments of an aircraft; and Section 4 describes how the safety model for the A-37 aircraft was developed. Appendix A summarizes the contractual history of the development of the FSPT; Appendix B discusses mathematical considerations underlying the technique; Appendix C discusses FSPT documentation methods; and Appendix D presents functional relationship diagrams and a listing of keypunch cards that comprise the safety model documentation for the A-37 and T-37 aircraft.

2

METHODOLOGY UNDERLYING FSPT

This section discusses the basic definitions and mathematical concepts associated with the Flight Safety Prediction Technique.

2.1 DEFINITION OF SAFE AIRCRAFT

To develop a relative measure of aircraft safety degradation resulting from specific equipment malfunctions, it is first necessary to define a "safe" aircraft. For purposes of the FSPT assessments, an aircraft is assumed to be in a safe condition if it is operating within its prescribed performance limits. Conversely, an aircraft operating (or about to operate) outside these limits is considered to be unsafe — in a condition where property damage and personal injury may result.

The safety prediction methodology does not attempt to assess the extent of possible personal injury or aircraft damage resulting from an unsafe condition. Neither does the concept consider ejection capability, parachutes, life rafts, etc., which do not make an aircraft safer per se but provide for the survivability of the aircrew when the aircraft is unsafe. Collision is also excluded from consideration because of the complexity of the interrelationships between pilot, aircraft equipment, ground surveillance, and traffic density.

2.2 MATHEMATICAL BASIS OF FSPT

The probability of an accident caused by the failure of an element can be expressed as the probability of the element failing multiplied by the conditional probability that the failure of the element will cause an accident. Stated in equation form:

$$P(A, j) = P(j)P(A|j) \quad (1)$$

where

$P(A, j)$ = Probability of an accident due to failure of just the j^{th} element*

$P(j)$ = Probability that element j fails

$P(A|j)$ = Probability of an accident given that the j^{th} element fails.

This equation reflects the basic relationships addressed in the FSPT where:

- a. The criticality of the j^{th} element is an estimate of $P(A, j)$
- b. The sensitivity of the j^{th} element is an estimate of $P(A|j)$

*In this and subsequent discussions, unless otherwise stated, expressions such as "failure of the j^{th} element" should be interpreted to mean: failure of only the j^{th} element, assuming all other elements are not failed.

Because an element's effect on safety may depend on the mission phase (see Section 3.2.1), the above model can be expanded to:

$$P(A, j) = \sum_{k=1}^N P_{j,k} P(A|j, k) \quad (2)$$

where

N = Number of mission phases

$P_{j,k}$ = Probability that the j^{th} element is failed in the k^{th} phase

$P(A|j, k)$ = The j^{th} element's sensitivity in the k^{th} phase.

To identify the importance of discrete elements to aircraft safety, a flight profile consisting of nine distinct phases was defined. The phases are discussed in Section 3.2.1.

To utilize equation 2, it was necessary to develop a method for obtaining the values of $P(A|j, k)$, the probability that a malfunction in element j during mission phase k will result in an accident. This method in turn requires the estimation of two parameters: the probability of accident if a major function is not available during each mission phase, and the dependence of the major function on subfunctions and elements during each such phase*. Each function and equipment item thus derives its sensitivity value from its relationship to the major function(s) dependent upon it.

2.3 SENSITIVITY ASSIGNMENTS

A great deal of information is available on the causes of aircraft accidents, but little exists from which to make the sensitivity assignments [$P(A|j)$]. These assignments are therefore largely subjective, based on the analyst's knowledge of the system and any information he may have on previous accident history. The sensitivity assignments are reviewed (and revised as necessary) by an Air Force/contractor team working on a particular model to ensure that consistent criteria have been followed. The team review and negotiation of sensitivity assignments is the mechanism by which the value becomes sufficiently objective for use with the model. This negotiation considers all of those top level functions as a group and reassigns sensitivity values as necessary to assure that the most objective proportionality is attained for the particular aircraft model. The same major-function sensitivity values are used for major functions on all aircraft models where configuration and mission profiles permit.

The development of criticality rankings for the various elements (j 's) is dependent upon the ability to quantify the failure probability [$P(j)$] and the element sensitivity [$P(A|j)$] for each element. Since the intent of the concept is to provide a relative safety ranking of all malfunctions, it is not necessary to develop absolute

*For a more detailed discussion of the mathematics of the FSPT, see Appendix B.

values for $P(A|j)$. If the sensitivity values developed are correct relative to each other, a proper criticality ranking will be established. It is intended that criticality be an index proportional to $P(A, j)$ and therefore provide the same relative rank ordering of elements. The major reasons for proportionality, rather than equality, are:

- a. The FSPT does not account for the effect of extraordinary pilot intervention to prevent an accident in case of equipment malfunction.
- b. Criticality quantification was limited in its treatment of simultaneous occurrence of independent, primary failures.
- c. Operational and malfunction data yield only a proportional estimate of the required information.

While strict proportionality cannot be mathematically proven, it is believed that the criticality rankings provide reasonable relative measures of equipment problem potential.

Figure 3-1 summarizes the approach to the assessment of flight-safety criticality of aircraft equipment. The first contractor activity is the identification of all functions the aircraft is expected to perform and the determination of their inter-relationships. Next, each functional relationship is documented; and then sensitivity assignments are made at the major functional levels (below these levels, link dependency values are estimated; see discussion, Section 3.2.2). This process is carried out until each work unit code associated with a major function has been identified with respect to the function performed and dependencies have been estimated. Computer processing calculates the safety sensitivity for each work unit coded item, combines these values with the operation and failure data input by the Air Force, and produces the equipment criticality ranking.

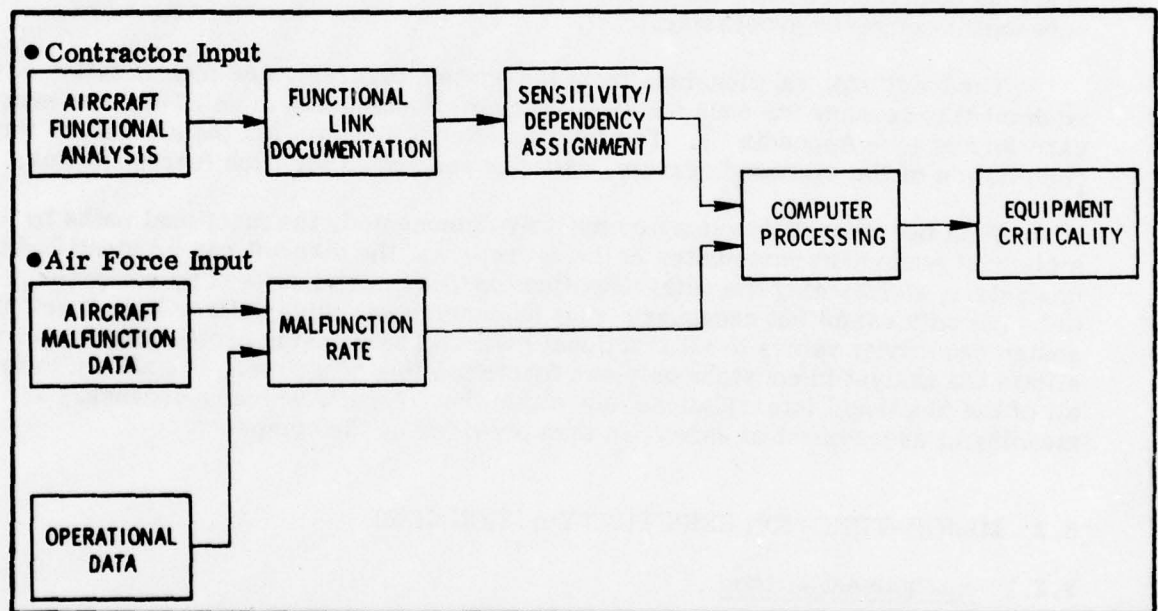


Figure 3-1. Activities and Data Inputs to Flight Safety Criticality Assessment

The steps in this process are discussed in greater detail in the following sections.

3.1 FUNCTIONAL ANALYSIS

Functional analysis entails the systematic identification of the relationships of hardware to the functions performed by the aircraft and documented in the aircraft technical orders. Tabulated for each aircraft function are the equipments necessary for its performance as well as all outputs required for other systems. The complexity of the functional interdependencies of an aircraft requires the use of a systematic

accounting procedure, as discussed below, to assure that all relationships have been identified and that no functional paths have been overlooked.

Certain top-level functions (comprised of both "primary" and "major" functions) have been defined as applicable to all aircraft types, and serve as the starting point for a safety analysis. Figure 3-2 lists these top level functions with the primary function of Flight Control expanded to show its typical major functions. Below the major function level, differences in aircraft types result in function identification and structuring specifically suited to each aircraft. In Figure 3-2, for instance, the major function Roll Control is subdivided into Left Roll and Right Roll, and further into aileron and spoiler actuation subfunctions. This structure is that applicable to an F-4 aircraft, in which ailerons have an extremely limited upward travel and lift is primarily lost through spoiler operation. Finally, each item in the aircraft WUC ("-06") manual is identified with respect to the function it performs. *

Every function and every WUC included in the model receives an "alpha designator" unique to that aircraft model. Due to the large number of alpha designators required in a model, an indenturing system is utilized to prevent duplication. However, the location in the hierarchal structure and the number of characters in the alpha designators are often independent, since such correlation is not necessary for subsequent computer processing.

The functional relationships from the system diagram, and identification of the equipment necessary for each function, are next documented in an 80-column punch-card format (see Appendix C). The total functional diagram for the aircraft is then a compilation of the system diagrams, with one punchcard for each functional link.

With the aircraft functions completely documented, the functional paths by which a piece of equipment contributes to the operation of the aircraft can be identified by computer. Performing the path-identification/documentation task by computer proves to be not only useful but necessary - the human analyst could neither keep track of nor assign sensitivity values to all functional paths. The machine processing capability allows the analyst to consider only one functional link at a time. The ability to follow all of the functional interrelationships within the aircraft, which is necessary for meaningful assessment of safety, is then provided by the computer.

3.2 MAJOR-FUNCTION SENSITIVITY ASSIGNMENT

3.2.1 Assignment Method

As stated earlier, the sensitivity of a function or equipment item is an estimate of the probability that its failure will cause an accident. From functional analysis of the aircraft under consideration, major functions are identified and are assigned sensitivity values for each phase of the mission.

*Certain WUC items in the "-06" manual may not be included in the safety model, these items being either 1) eliminated by TCTOs; 2) purely structural items in the 11000 series; 3) necessary only for survivability or ejection; 4) of lower indenture than the LRU level, where computer data screening eliminates failure reports.

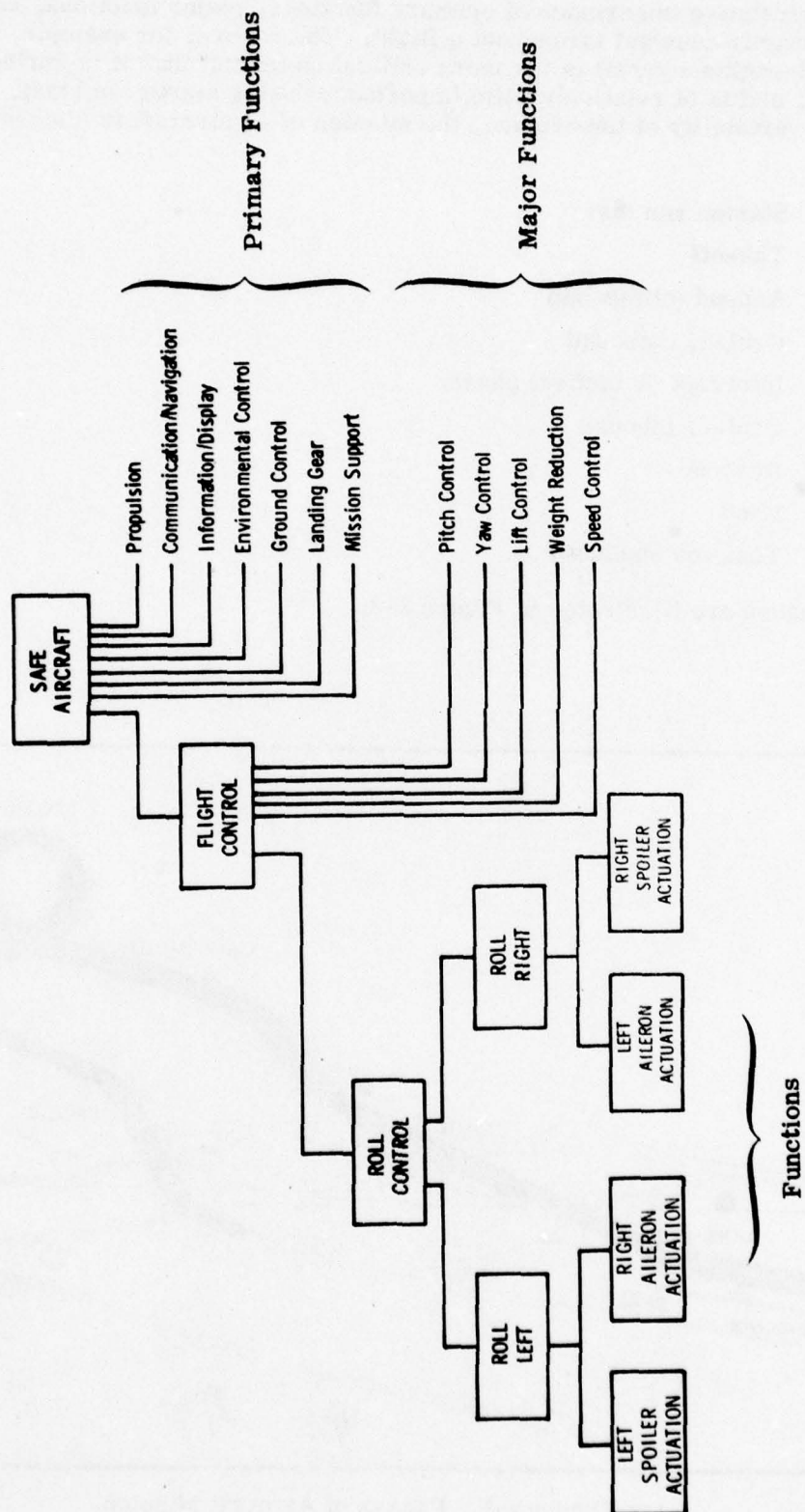


Figure 3-2. Hierarchical Structure of Aircraft Functions

The relative importance of primary functions, major functions, and functions is not necessarily constant throughout a flight. The failure, for example, of one engine of a multi-engine aircraft is far more critical on takeoff than it is during the rest of the flight, and is of relatively little importance during startup and taxi. To accommodate this variability of importance, the mission of an aircraft is divided into nine flight phases:

1. Startup and taxi
2. Takeoff
3. Ascend (climb-out)
4. Cruise, outbound
5. Intercept or tactical phase
6. Cruise, inbound
7. Descend
8. Land
9. Taxi and shutdown

These phases are illustrated in Figure 3-3.

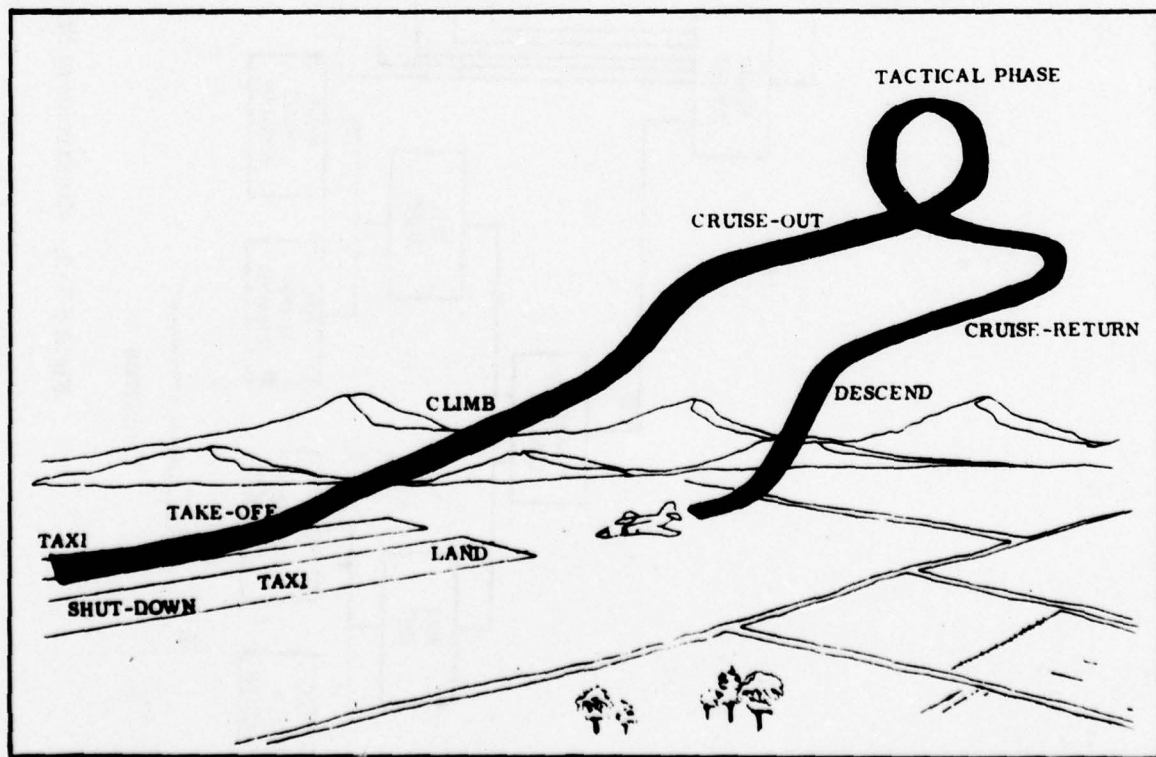


Figure 3-3. Phases of Aircraft Mission

A sensitivity value is assigned for each of the phases, and represents the best estimate of the likelihood that the aircraft will enter a hazardous mode if the function is not present in that phase. The numerical values assigned are proportional rather than absolute, and range from 0.0 to 1.0. The keypunch card format limits this assignment to increments of 0.1. Increments smaller than 0.1, when required, were assigned by defining a quasi-function for insertion between the major function and its dependent primary function.

3.2.2 Link Dependency Assignment

"Link dependency" is defined as the probability that the loss of a function will result in the loss of a dependent function. (For a more detailed discussion of this term, see Appendix B.) The assignment of link dependency values requires knowledge of the operation of specific aircraft because it is concerned only with functional levels below the "major" category. At this lower level, no evaluation is made of the impact on flight safety of the loss of functions. Instead, the effect of the loss of one function on the performance of another function becomes the evaluation criterion. Like sensitivities, link dependency values are assigned in increments of 0.1. Additionally, the method of attenuation used in assigning sensitivity values can also be applied to link dependencies.

3.2.3 Provisory Factors

The sensitivity of major functions with respect to aircraft safety, and at the lower levels the link dependency between functions, can be dependent on external influences and aircraft operating conditions. To accommodate these external influences, a set of provisory factors has been identified. An example would be a windshield anti-ice system, which has a safety sensitivity close to 1.0 during landing under icing conditions but a negligible effect on a dry, warm day.

Under such circumstances, the procedure is to assign the "worst case" value (assuming the condition exists). During model exercise the likelihood that the condition exists can be "read-in", thereby allowing the sensitivity value to be assigned by the computer based on the likelihood of the condition and the probability that the higher level function will therefore be lost. Table 3-1 lists the standard provisory factors used in FSPT models.

3.2.4 Computer Processing

Documentation of a flight safety analysis by ARINC Research thus consists of functional diagrams, coded functional tabulations, a functional data processing card deck, and a machine-prepared printout of the card deck data. Under this contract, the documentation is then sent to San Antonio Air Logistics Center for review by MMER personnel and representatives of the Air Logistics Center responsible for the particular aircraft (if other than SA/ALC).

SA/ALC processes the functional data card deck utilizing a number of computerized operations. First, a functional deck edit is accomplished to identify certain format or logic errors that may exist. Next, a path identification/documentation run is made that traces all possible paths associated with each function and calculates the numerical sensitivities by flight phase down to the WUC level. Then, a path combination run is made taking into account the dependence of more than one major function on a particular WUC. Finally, failure information from the 66-1 data system and numerical factors for provisory conditions are input and a WUC criticality list by rank order is generated by the computer.

TABLE 3-1. PROVISORY FACTOR CODES

Code	Provisory Condition
A	Icing conditions
B	Adverse speed/altitude operations
C	Runway stopping distance/confined area (Helicopter)
D	Night operation
E	IFR conditions
F	Supersonic flight
G	Rain
H	Solo flight
I	Loss of function for which indication is provided
K	Normal system failed
T	Flame-out
X	Fire
Y	Cold weather
2	One of three available units is required
3	Two of three available units are required
4	One of four available units is required
5	Two of four available units are required
6	Three of four available units are required
8	Four of eight available units are required

An additional product generated by the computer is a two-part criticality trend analysis. Part I contains the criticality rankings and linear regression analysis by WUC for the previous 12 months. Part II contains plots of the criticalities and regression lines for the 25 WUCs top-ranked according to safety criticality.

3.2.5 Model Maintenance

Each time an aircraft type for which a safety model has been developed undergoes a modification, the effects of the changes on the model must be evaluated. Technical order and WUC revisions must be incorporated into the model. Removal of existing hardware, the installation of new hardware, or design improvements may change link dependencies and sensitivity assignments. The update procedure should follow the same general steps as outlined for the initial analysis effort.

Existing block diagrams and a printout of the functional card deck form the baseline for change identification. Functional relationships should be reviewed to determine the impact of changes on the documented safety analysis. Diagrams should be revised to reflect functional differences, WUC changes should be noted, and all differences listed on a flight-safety functional tabulation sheet. The functional deck printout can be used for manual indication of what the changes are and where they occur. New data cards are prepared and the functional deck updated by the removal of obsolete cards and the insertion of new cards. From this point on, the computer is again utilized to edit the functional deck, perform path identification/documentation, and calculate sensitivities for each WUC.

Block diagrams and other affected portions of the specific aircraft safety analysis report should be updated and revised pages issued that reflect these changes. Maintaining an accurate and updated model is important to obtaining an accurate assessment of the safety significance of hardware failures.

A-37/T-37 MODEL DEVELOPMENT

The FSPT models for the A-37 and T-37 aircraft have been developed under two contracts. The first contract (F41608-71-C-0576) covered the T-37 aircraft and was completed in June 1971. Results of that effort are documented in ARINC Research publication 697-01-1-1118.

The second (present) contract applies to the A-37 aircraft. Model development for the A-37 was initiated in January 1974, and the completed documentation was submitted to SA/ALC for computer edit in June 1974.

While there was no requirement to rework the T-37 model under the present contract, that model has been modified to reflect improved modeling techniques developed subsequent to the initial effort. Appendix D of this publication includes the documentation for the T-37 model.

The aircraft flight manual and maintenance technical orders provided the information on aircraft system operation. The A-37 model developed represents the aircraft configured to the latest time compliance technical orders documented in the manuals supplied by SA/ALC. Table 4-1 lists the manuals and their revision status applicable to the A-37 models.

A single functional documentation deck of 80-column punchcards having "37" in columns 2, 3 was used for the two versions of the aircraft. Cards having a blank in column 1 are common to both aircraft. When the common cards are combined with those having an "A" in column 1, the resulting deck documents the A-37 aircraft. Similarly the common cards together with the cards containing a "T" in column 1 document the T-37 Aircraft.

The A-37 safety model was developed by ARINC Research for all systems except the landing gear. The landing gear diagram and functional documentation cards were produced by MMER/SA/ALC, and interface documentation for the landing gear was a joint effort by SA/ALC and ARINC Research.

Because of the vulnerability of the functional logic/sensitivity documentation to such errors as omission of links, duplication of cards, and keypunching, quality reviews were conducted at various critical points in the model development. In addition to keypunch verification, each card was checked against the functional link shown on the original rough draft and the final functional diagram and the diagrammed link was checked off. Missing or duplicated functional links were thus identified. Work unit codes used in the model were checked off against the WUC manual to assure completeness.

The quality reviews were first conducted by the organizations responsible for the subsystems prior to merging and computer verification of the respective aircraft decks by SA/ALC. Following the merging of the Air Force/ARINC Research decks and computer verification at SA/ALC, a second quality review was performed by representatives of ARINC Research and SA/ALC. Finally, the first criticality

printout obtained from application of actual aircraft data was reviewed to identify any items whose sensitivity appeared to be unreasonable. In such cases the paths were traced manually and changes made if an erroneous relationship was found.

Appendix C presents the methods and standards used in documenting an FSPT aircraft model. Appendix D presents the FSPT documentation of the A-37 and T-37 aircraft, which covers both the SA/ALC and ARINC Research portion of the models.

TABLE 4-1. A-37 SYSTEM DOCUMENTATION

Publication No.	Title	Revision/Date
1A-37A-1	A-37A Aircraft Flight Manual	Change 10, 1 May 1972
1A-37A-2-3	Hydraulically Generated Systems and Utility Systems	Change 14, 1 Mar 1972
1A-37A-2-5	Power Plant & Fuel System	Change 17, 1 Sept 1972
1A-37A-2-6	Instruments, Radio Communication, and Navigation Equipment	Change 14, 1 Mar 1972
1A-37A-2-7	Electrical System	Change 15, 1 May 1968
1A-37A-2-8	Wiring Diagrams and Data	Change 16, 1 Sept 1972
1A-37A-2-9	Organizational Maintenance Armament and Photographic Equipment	Change 4, 1 Mar 1972
1A-37A-06	A-37A Work Unit Code Manual	Change 4, 15 Feb 1972

APPENDIX A
HISTORICAL SUMMARY OF FSPT

HISTORICAL SUMMARY OF FSPT

In 1965, the desirability and practicability of quantifying the significance of specific equipment malfunctions relative to flight safety was explored in a feasibility study conducted by ARINC Research Corporation for the Air Force. The feasibility of a safety-quantification approach, which has subsequently become known as Flight Safety Prediction Technique (FSPT), was demonstrated; and the method was developed and refined in a series of studies, as follows:

<u>Study Phase</u>	<u>Subject/Date</u>	<u>Sponsor*/Publication No.</u>
I	Feasibility Study, September 1965 to June 1967 (Phase I)	Sacramento Air Materiel Area (SMNE), Contract AF09(603)62335, SM-67-2; publication 705-01-1-777
II-A	Technique Development, October 1967 to July 1968 (Phase II-A)	San Antonio Air Materiel Area (SANEW), Contract AF09(603)-67-A-0267-SA01; publication 734-01-1-895
II-B	Technique Development, July 1968 to July 1969 (Phase II-B)	San Antonio Air Materiel Area (SANEW), Contract F09(603)-68-A-0317-SA01; publication 754-01-1-985 (Revision 1)
	FSPT System Documentation for the F-4C and T-37 Aircraft, October 1970 to June 1971	San Antonio Air Materiel Area (MMER) Contract F41608-71-C-0576; publication 697-01-1-1118

In the Phase II-B study, the FSPT was applied to the F-106 aircraft. Concurrent with Phase II-B, the U.S. Naval Safety Center contracted ARINC Research to extend the methodology to produce a flight safety criticality model for the F-4J aircraft. The results of this effort are documented in ARINC Research Publication 753-01-3-982 (Revision 1).

In 1970, ARINC Research was contracted to develop suitable input data to permit the application of the technique to the T-37 and F-4C aircraft. These data were derived in the form of mathematical model functional documentation as input to the basic computer program developed and applied to the F-106.

In 1972, ARINC Research Corporation was awarded a contract, with the subsequent modifications in 1973 and 1974, to apply the Flight Safety Prediction Technique to 15 aircraft, working jointly with cognizant Air Logistics Centers. Aircraft to which the FSPT has been applied under this latter contract (F09603-72-A-1132-SA01) include:

- a. T-38
- b. F-111A and FB-111A

*The office symbols of Service Engineering at the Sacramento and San Antonio Air Materiel Areas are now SM/ALC/MME and SA/ALC/MME, respectively.

- c. A-7D
- d. F-4D, E; RF-4C
- e. C-141
- f. A-37
- g. O-2
- h. OV-10
- i. B-52G, H
- j. C-130E
- k. KC-135
- l. C-5A
- m. T-39
- n. F-15
- o. UH-1N Helicopter*

*Feasibility study of adaptation of FSPT to rotary-wing aircraft.

APPENDIX B
FORMULATION OF CRITICALITY-ASSESSMENT TECHNIQUE

FORMULATION OF CRITICALITY-ASSESSMENT TECHNIQUE

To implement the basic safety model defined in Section 2.2, it is necessary to develop a submodel for the probability that a malfunction in element j during mission phase k will result in an accident. This submodel in turn requires that we estimate two parameters: the probability of accident if a major function is not available during each mission phase, and the dependence of the major function on element j during each mission phase.

The first parameter is termed "functional sensitivity" and is estimated for each major function. The functional analysis performed in this task established for an aircraft the following hierarchal scheme:

Aircraft

Primary functions

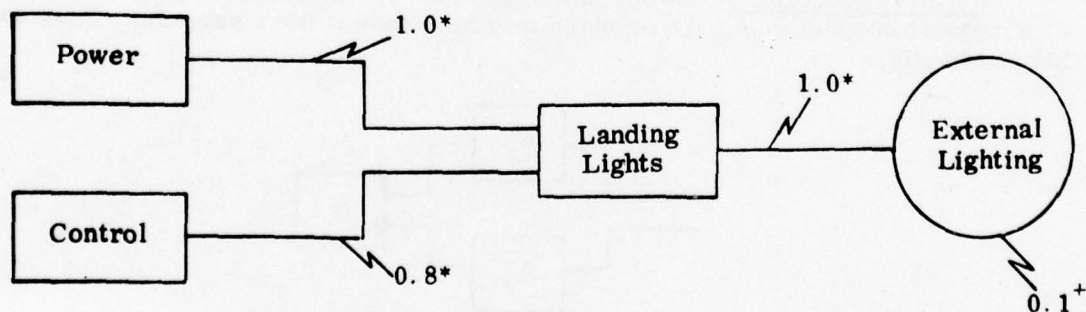
Major functions

Function

Elements (Work Unit Codes)

A primary function would be one such as Flight Control. Major functions under Flight Control would include Pitch Control and Yaw Control.

The second parameter, "link dependency," is a vehicle for showing the influence of each functional-path element on the performance of a major function. For example, if the major function being considered is External Lighting, the following diagram illustrates the nature of functional sensitivity and link dependency values.



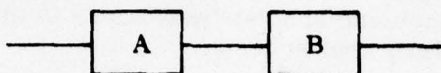
*Link dependencies
+Functional sensitivity

The 0.8 value means that failure of the Control function will result in loss of the Landing Light function 80% of the time. The 0.1 functional sensitivity value denotes that loss of external lighting will result in an accident 10% of the time. The values must be interpreted in a proportional sense, in that the actual accident probability is dependent upon external factors (see Section 3.2.3).

The remainder of this appendix discusses the procedures and model used to obtain element sensitivities; e.g., in the above example, the accident probability given that a Work Unit Code in the Control function malfunctions.

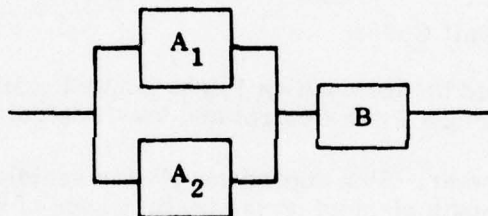
Three principal types of functional relationship--series, redundant, and parallel--were identified as representing the major forms to consider in modeling element sensitivity.

Series Relationship - A function having only one input. Schematically,



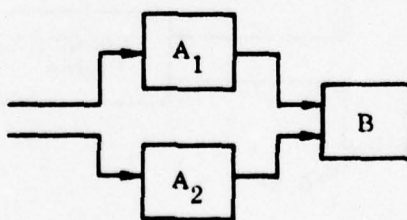
which indicates that outside of its own elements, the success of function B is only affected by the success of function A.

Functional Redundancy - A function having one or more backup functions that can provide the required inputs to successor functions. Schematically,



where A_1 and A_2 represent a functional redundancy in that either may provide the necessary input to B.

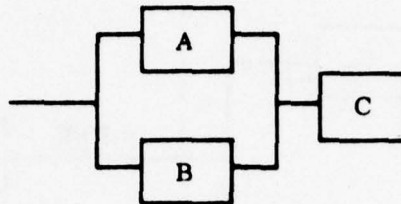
Parallel Functions - Two or more functions independent of each other in terms of functional success, but each of which may be required for a successor function. Schematically,



B will generally require both A_1 and A_2 ; but A_1 does not depend on A_2 , nor does A_2 depend on A_1 .

In some cases the distinction between functional redundancy and parallel paths is very slight, and may depend on mission phase. For example the four engines of a plane can be considered to be a redundant configuration providing inputs to the primary propulsion function during cruising, but would generally be considered to be parallel functions during takeoffs requiring full power.

In general, given a schematic relationship of the form,

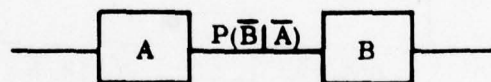


we can say that A and B are in a functionally redundant configuration if the success probability of C is the same if 1) A and B are successful, 2) A only is successful, or 3) B only is successful. If, for example, C is more likely to be successful if both A and B are successful, rather than A or B alone, then the relationship is one of parallel paths.

It is noted that the model will also account for element redundancy and parallel elements through inputs such as $P(\bar{A}|i_a)$, representing the probability that the Ath function fails given that the i_a^{th} element in A has failed. If i_a is a parallel element, the probability would depend on mission requirements and other parallel-element states.

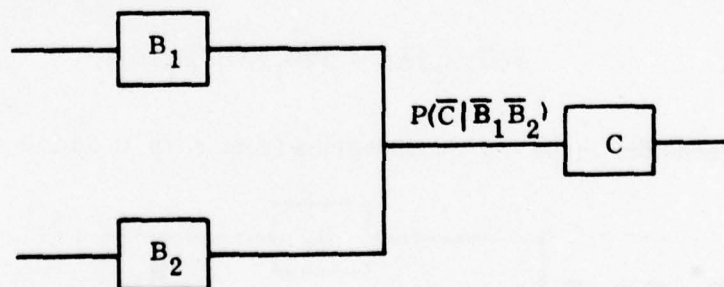
Link dependency is the conditional probability of a functional failure, given the failure of immediate predecessor functions. The link dependencies applicable to the three basic designs defined above are shown below.

Series Relationship

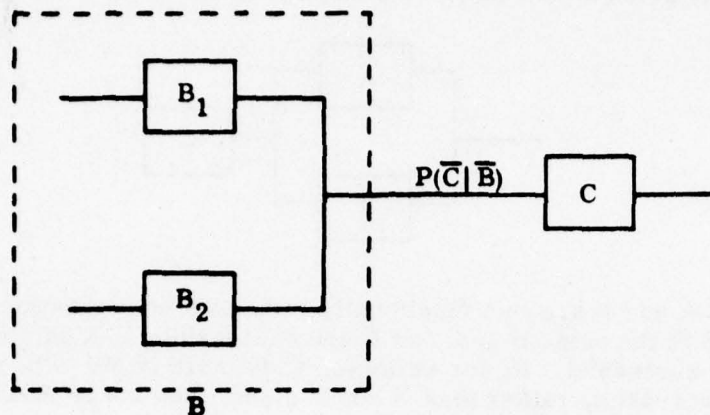


Link dependency = $P(\bar{B}|\bar{A})$ = probability that B fails given that A fails.

Functional Redundancy

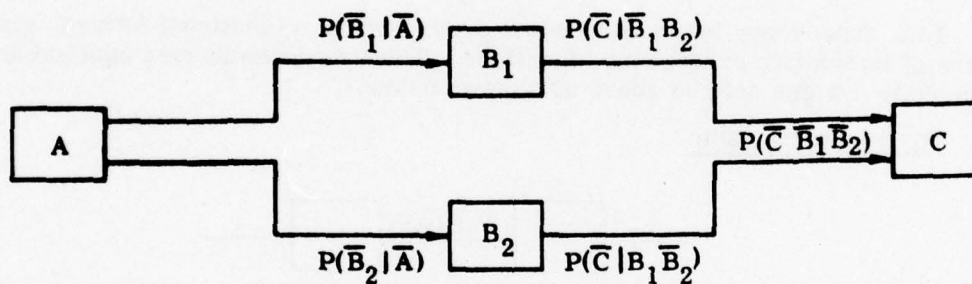


equivalent to



where $\bar{B} = \bar{B}_1\bar{B}_2$

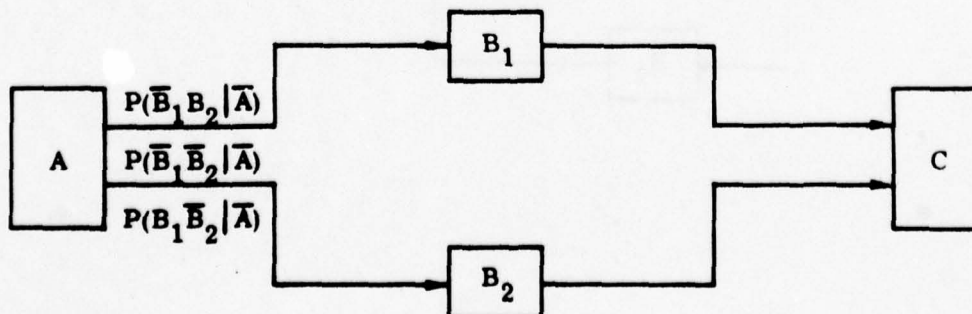
Parallel Functions



We shall generally assume that the dependencies of B_1 with respect to A , and of B_2 with respect to A , are independent of each other, so that

$$P(\bar{B}_1\bar{B}_2|\bar{A}) = P(\bar{B}_1|\bar{A})P(\bar{B}_2|\bar{A})$$

We then can consider three link dependencies from A to B as follows:



noting that

$$P(\bar{B}_1|\bar{A}) = P(\bar{B}_1 B_2|\bar{A}) + P(\bar{B}_1 \bar{B}_2|\bar{A})$$

$$P(\bar{B}_2|\bar{A}) = P(B_1 \bar{B}_2|\bar{A}) + P(\bar{B}_1 \bar{B}_2|\bar{A})$$

Models are shown below for determining the sensitivity of elements within a function for each of the three basic designs. The following basic assumptions apply:

- a. Except for cases where an element has a redundant or parallel counterpart or is located in a function with a redundant or parallel function, only the element under consideration shall be assumed to have failed initially. Thus the expression $P(A|i_a)$, representing the accident probability given failure of the i th Work Unit Code element, is based on the assumption that no other element has failed unless element i is in some redundant or parallel configuration. For cases in which there are redundant or parallel counterparts, failures of such counterpart elements or functions are considered in accordance with their occurrence probabilities.
- b. The success of all immediate predecessors ensures the success of a function, provided that the function experiences no element failures. Thus for the series function relationship



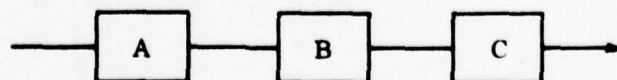
we assume

$$P(\bar{B}|A) = 0,$$

provided B experiences no element failures. If an element in function A is under consideration, the latter provision is always true by assumption "a."

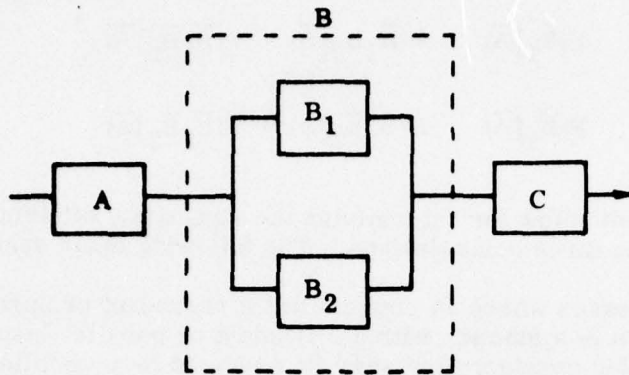
The element sensitivity models are:

Series Relationship



$$P(A|i_a) = P(\bar{A}|i_a)P(\bar{B}|\bar{A})P(\bar{C}|\bar{B})P(A|\bar{C})$$

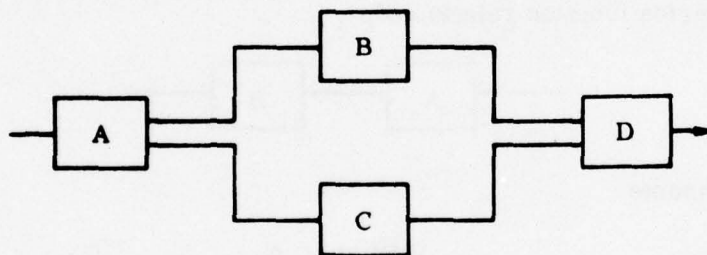
Functional Redundancy



$$P(\mathcal{A}|i_a) = P(\bar{\mathcal{A}}|i_a)P(\bar{\mathcal{B}}|\bar{\mathcal{A}})P(\bar{\mathcal{C}}|\bar{\mathcal{B}})P(\mathcal{A}|\bar{\mathcal{C}})$$

$$P(\mathcal{A}|i_{b1}) = P(\bar{\mathcal{B}}_1|i_{b1})P(\bar{\mathcal{B}}_2)P(\bar{\mathcal{C}}|\bar{\mathcal{B}})P(\mathcal{A}|\bar{\mathcal{C}})$$

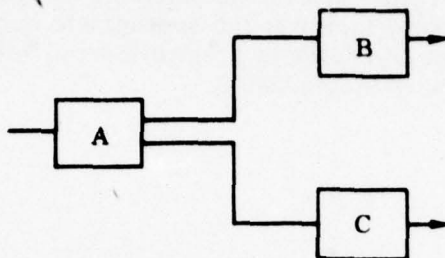
Parallel Functions



$$P(\mathcal{A}|i_a) = P(\bar{\mathcal{A}}|i_a) \{ P(\bar{\mathcal{B}}\bar{\mathcal{C}}|\bar{\mathcal{A}})P(\bar{\mathcal{D}}|\bar{\mathcal{B}}\bar{\mathcal{C}}) + P(\bar{\mathcal{B}}\bar{\mathcal{C}}|\bar{\mathcal{A}})P(\bar{\mathcal{D}}|\bar{\mathcal{B}}\bar{\mathcal{C}}) \\ + P(\bar{\mathcal{B}}\bar{\mathcal{C}}|\bar{\mathcal{A}})P(\bar{\mathcal{D}}|\bar{\mathcal{B}}\bar{\mathcal{C}}) \} P(\mathcal{A}|\bar{\mathcal{D}})$$

$$P(\mathcal{A}|i_b) = P(\bar{\mathcal{B}}|i_b) \{ P(\bar{\mathcal{C}}|i_b)P(\bar{\mathcal{D}}|\bar{\mathcal{B}}\bar{\mathcal{C}}) + P(\mathcal{C}|i_b)P(\bar{\mathcal{D}}|\bar{\mathcal{B}}\bar{\mathcal{C}}) \} P(\mathcal{A}|\bar{\mathcal{D}})$$

A case not explicitly included in the above three basic functional relationships is one for which a function is in two paths, e.g.,



then

$$P(A|i_a) = P(\bar{C}|i_a)P(B|i_a)P(A|\bar{C}B) + P(C|i_a)P(\bar{B}|i_a)P(A|C\bar{B}) \\ + P(\bar{C}|i_a)P(\bar{B}|i_a)\{1 - P(A|\bar{C})P(A|\bar{B})\}$$

where it is assumed that the effects of loss of the major functions in accident occurrence are independent of each other.

Use of Numerical Provisory Factors for Partially Redundant Systems

The numerical provisory factors (see Table 3-1) are used where more than two identical functions are involved in a redundancy. For example, aircraft with more than two engines often have identical and independent systems for hydraulic pressurization, and for electrical power generation, one driven by each engine. If the aircraft can be operated safely with one or more of such systems in a failed state, one of the numeric codes is utilized in assigning link dependency values. Consider, for example, the following:

If N identical and independent units* are available and at least M are required for safe operation, where $0 < M < N$, then the provisory factor of a given unit, say U_j , is the probability that the failure of U_j will cause the aircraft to enter an unsafe state. This is the probability that exactly $M-1$ of the remaining $N-1$ units will be in an unfailed state. This probability can be calculated by the formula for the binomial distribution, and is given by

$$P(U_j) = \binom{N-1}{M-1} p^{(M-1)} q^{(N-M)}$$

where $P(U_j)$ = probability that failure of the j^{th} unit will cause the aircraft to enter an unsafe state, and

M = Number of units required

N = Number of units available

p = Probability that a single unit will be in an unfailed state

q = Probability that a single unit will be in a failed state or $(1-p)$

*Units may be either elements, element assemblies, or functions.

Assignment of link dependencies to N identical and independent units of which only M are required proceeds as follows. The value assigned to each unit is the dependency of the higher level function on receiving an output from M of the units (usually 1.0). The provisory factor is the appropriate numeric code. In the evaluation of the path sensitivity, the computer is programmed to select the binomial formula that corresponds to the provisory factor listed.

APPENDIX C
FSPT DOCUMENTATION METHODS

FSPT DOCUMENTATION METHODS

Because of the extreme complexity of aircraft, it is necessary to develop a computerized method to identify and document all possible paths associated with each function as well as to determine the safety sensitivity associated with each path. A computer routine has been devised that takes the data from the functional card deck and traces and documents all paths. For each WUC, it also computes the flight-phase sensitivities for each path in which the WUC is present. The resulting computer printout provides a combined functional path sensitivity.

C.1 ALPHA CODING

As each system of the aircraft is functionally diagrammed, the functional blocks are assigned an "alpha code". This code aids the analyst in the bookkeeping tasks of functional diagramming and provides the computer with an identification of the elements to be processed. For standardization among aircraft, nine top-level functions have been defined and each has been assigned an initial or first-alpha designator. Each block in the functional diagram carries the same initial alpha as the top level function. Subsequent letters added to the initial alpha uniquely identify each block.

The only restrictions placed on the assignment of alpha codes are that:

- a. All characters in a code must be a letter of the alphabet, and
- b. The maximum number of characters in one code is seven.

C.2 ALPHA CODING AND COMPUTER PROGRAM COMPATIBILITY

Additional rules for alpha coding required to obtain the desired results from computer processing include:

- a. When a WUC item operates in the same mode to perform more than one function, the same alpha code is used in each application.
- b. When a WUC item operates in a different mode to perform each of more than one function, a different alpha designator is assigned for each operating mode.

C.3 FUNCTIONAL TABULATION

The "Flight Safety Functional Tabulation" sheet is used to code the safety model for keypunching. The sheets are coded as follows (refer to Figure C-1) for an example).

- a. Columns 1 through 3. Used to identify the aircraft represented by the model. For certain aircraft modeled under this contract more than one model - designation series MDS - was included. For instance, a single functional deck was created for four MDSs of the F-4 aircraft. Cards with "F4b"* in columns 1-3 were common to all aircraft. For example,

*b = blank

when these cards are combined with those carrying "F4E" in columns 1-3, then it produces an F-4E FSPT model deck.

- b. Columns 4 through 31. Contain the title of the function or the WUC item.
- c. Columns 32 through 36. Contain the left-justified WUC number.
- d. Columns 37 and 38. Blank
- e. Columns 39 through 46. Contain the assigned alpha designator for the function and/or the WUC. Column 39 contains either an L or an R, or is blank. The L and R designate left and right for those instances when the function and/or WUC pertains to the left or right side of the aircraft.
- f. Columns 47 and 48. Blank.
- g. Columns 49 through 55. Normally left blank, but are used after a deck is operational to substitute the data on a card for that stored in the computer by punching the line record number in this field.
- h. Columns 56 through 63. Identify the dependent functions for either the function or specific WUCs being coded. Column 56 may contain L, R or blank for the same purpose as that of column 39.
- i. Column 64. Contains the alphanumeric code of the "provisory factor" applicable to the link value assigned.
- j. Columns 65 through 69. Contain the alpha designator of a function that is an alternate for the function being coded. (Column 65 is used for "L" or "R" as in Column 39.) The presence of the "alternate alpha" flags the importance of the link dependency as being affected by the success probability of the alternate function.
- k. Column 70. Contains the work unit code dependency value (1 = 0.10; 2 = 0.20;A = 1.0). This value is applicable to all flight phases.
- l. Column 71. Contains special instructions to the computer through the use of letters F, S, or being blank. Cards with an "S" or "blank" in column 71 are used in sensitivity computations. Cards with an "F" document a functional relationships which, although present in the system, would produce an erroneous sensitivity value when combined with other nonindependent paths (having the same function in common at some higher level). The "F" prevents the computer from including the link in the sensitivity calculations.
- m. Columns 72 through 80. Contain functional dependencies for each of nine flight phases as described in Section 3.2.1 of the text. Coding is the same as for column 70.

C.4 DIAGRAM CONSTRUCTION

The diagrams produced under the contract document the functional inter-relationship of the aircraft systems considered in the model. In the interest of extending the useful life of the diagrams, WUC items are not shown, thereby eliminating the necessity of updating the diagrams with each (and sometimes frequent) change to the WUC manual.

As discussed earlier in this report, the diagrams represent the hierarchal structure of the paths from which the sensitivity values are derived. The diagrams, although consistent with the system schematic and reliability block diagrams, are not equivalent due to this hierarchal method of documentation. In the actual system, signals and/or fluids pass from one component to the next and are thus documented in schematics; conversely, the hierarchal approach only identifies the components that must operate to achieve a given function, independent of the direction and/or sequence of signal flow. This approach directly addresses the system impact of a component failure without the necessity of identifying the intrasystem secondary failures. Each line connecting functions on the diagram is documented by a punchcard, with the lower function providing the "alpha designator" and the higher function's alpha designator indicator as the "dependent function".*

*The card deck also documents functional relationships not shown on the diagram; the work unit codes (mentioned earlier) and the "S" cards discussed in paragraph C.3.1.

APPENDIX D

FSPT DOCUMENTATION OF A-37 AIRCRAFT
(Including Documentation for T-37 Aircraft)

FSPT DOCUMENTATION OF A-37 AIRCRAFT

This appendix contains the functional relationship diagrams and a listing of the keypunch cards that comprise the documentation of the A-37 and T-37 FSPT safety models.

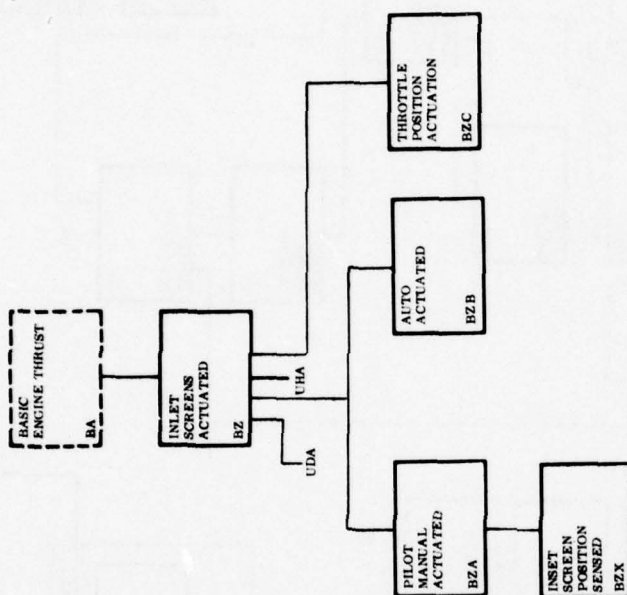
D.1 DIAGRAMS

The diagrams illustrating the functional relationships considered in the A-37 and T-37 safety models will be found on pages D-5 through D-19, and are listed below:

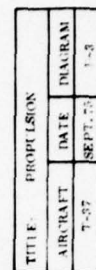
Aircraft		Title	Page
A-37	T-37		
X		Propulsion	D-5
X		Propulsion	D-6
	X	Propulsion	D-7
	X	Propulsion	D-8
X		Propulsion	D-9
X		Comm/Nav/Ident	D-10
	X	Comm/Nav/Ident	D-11
X	X	Information & Display	D-12
X	X	Environment	D-13
X	X	Flight Control	D-14
X	X	Flight Control	D-15
X	X	Ground Control	D-16
X	X	Landing Gear	D-17
X		Mission Support	D-18
X	X	Utilities (Electric & Hydraulic)	D-19

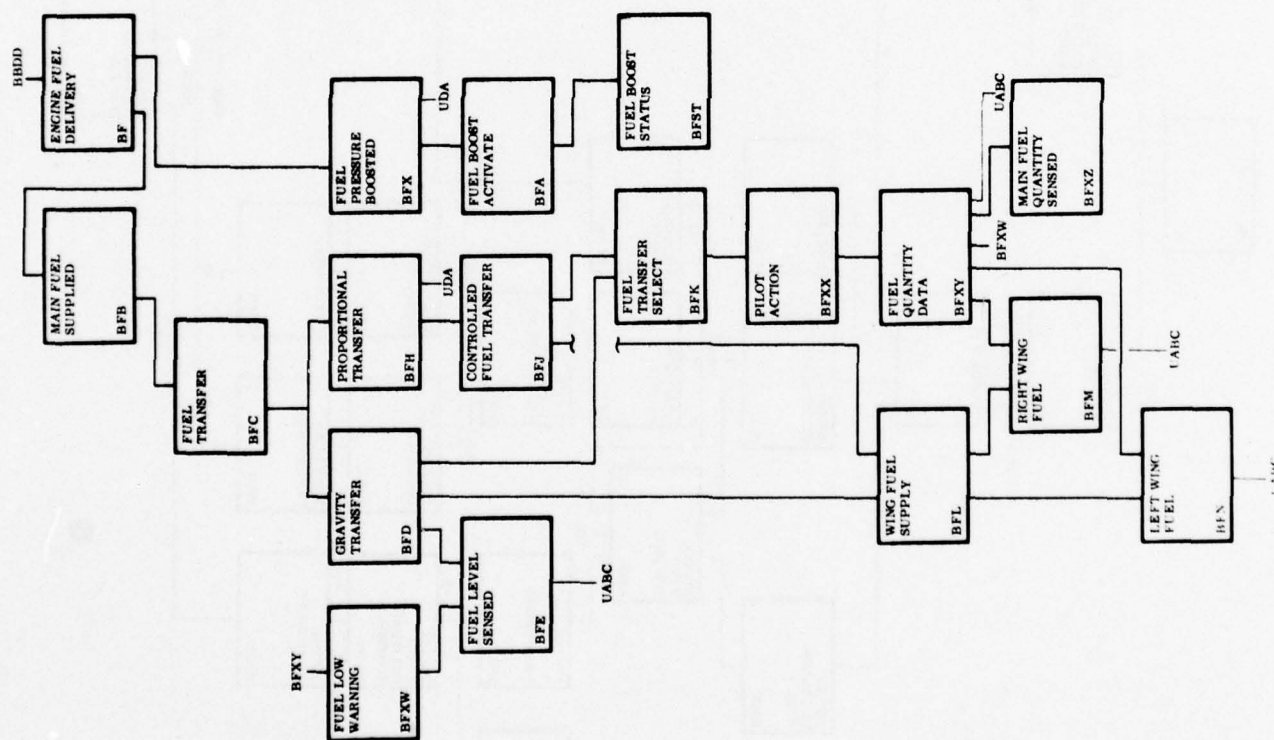
D.2 CARD LISTING

Pages D-21 through D-72 are a reproduction of the combined A-37/T-37 punch-card listing. The listing is alphabetical by "alpha designator", and the format is that of the 80-column punchcard itself as described in Appendix C. At the top of each page the card columns are printed vertically; for example, column 34 is printed "3".

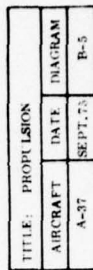


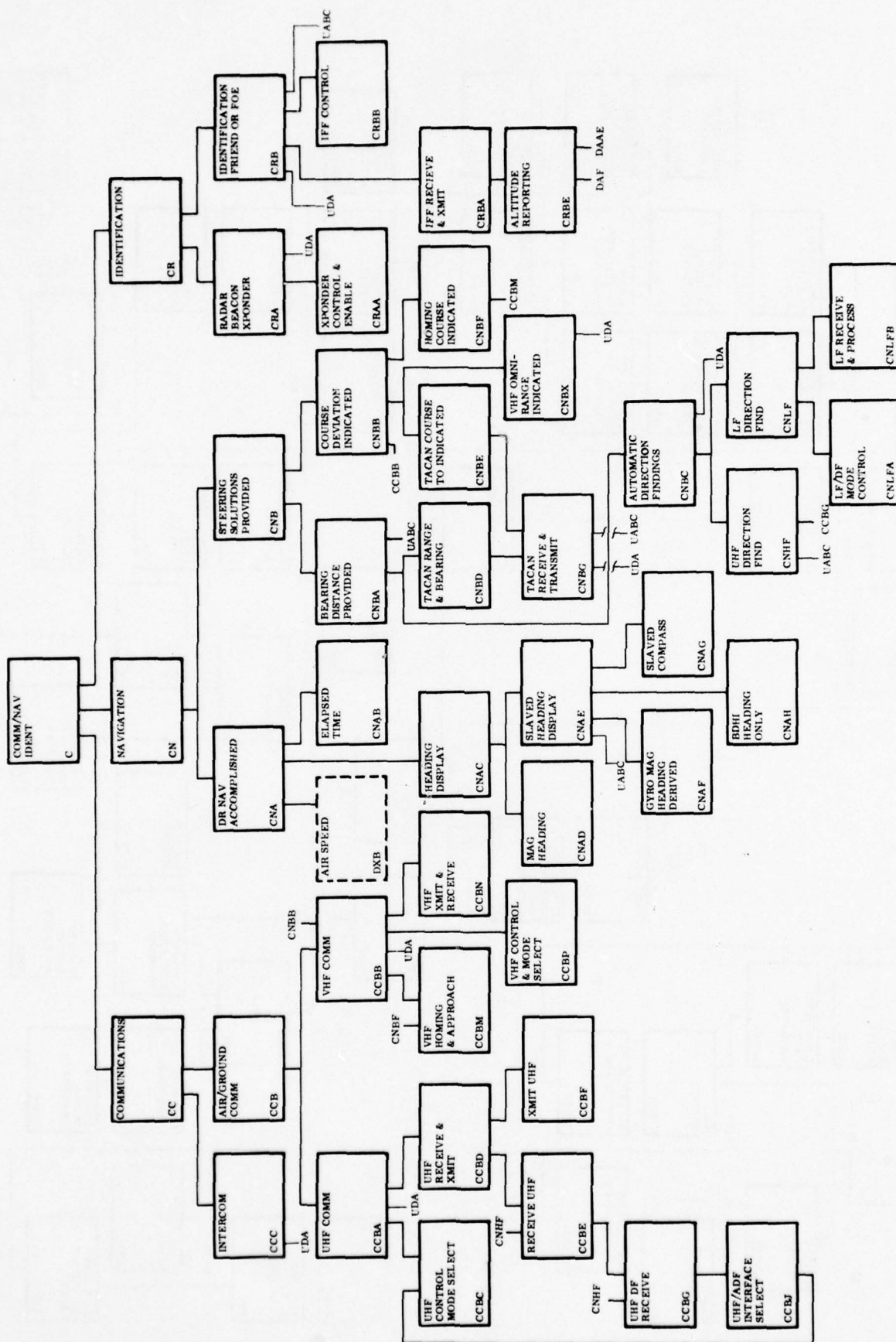
TITLE: PROPULSION		
AIRCRAFT	DATE	DIAGRAM
A-37	SEPT. 73	D-2



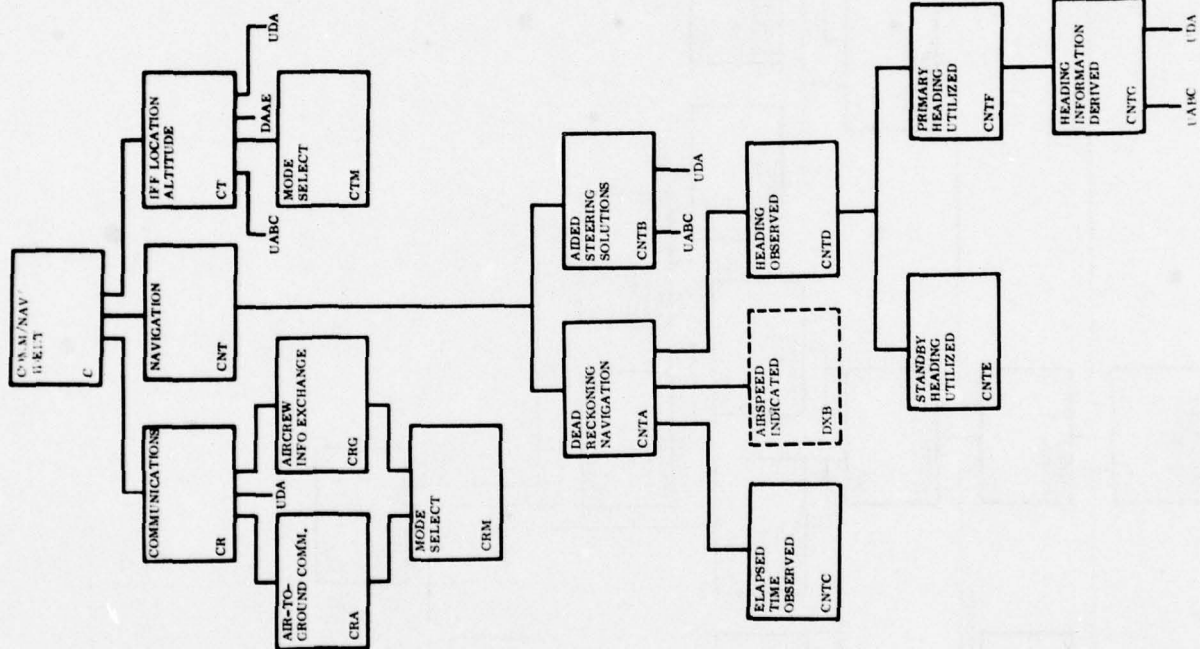


TITLE: PROPOSITION		
AIRCRAFT	DATE	DIAGRAM
T-37	SEPT. 25	1-4

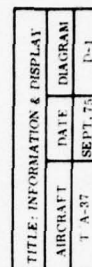


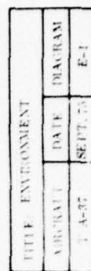


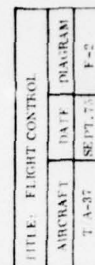
TITLE: COMM/NAV IDENT		
AIRCRAFT	DATE	DIAGRAM
A-37	SEPT. 73	C-1

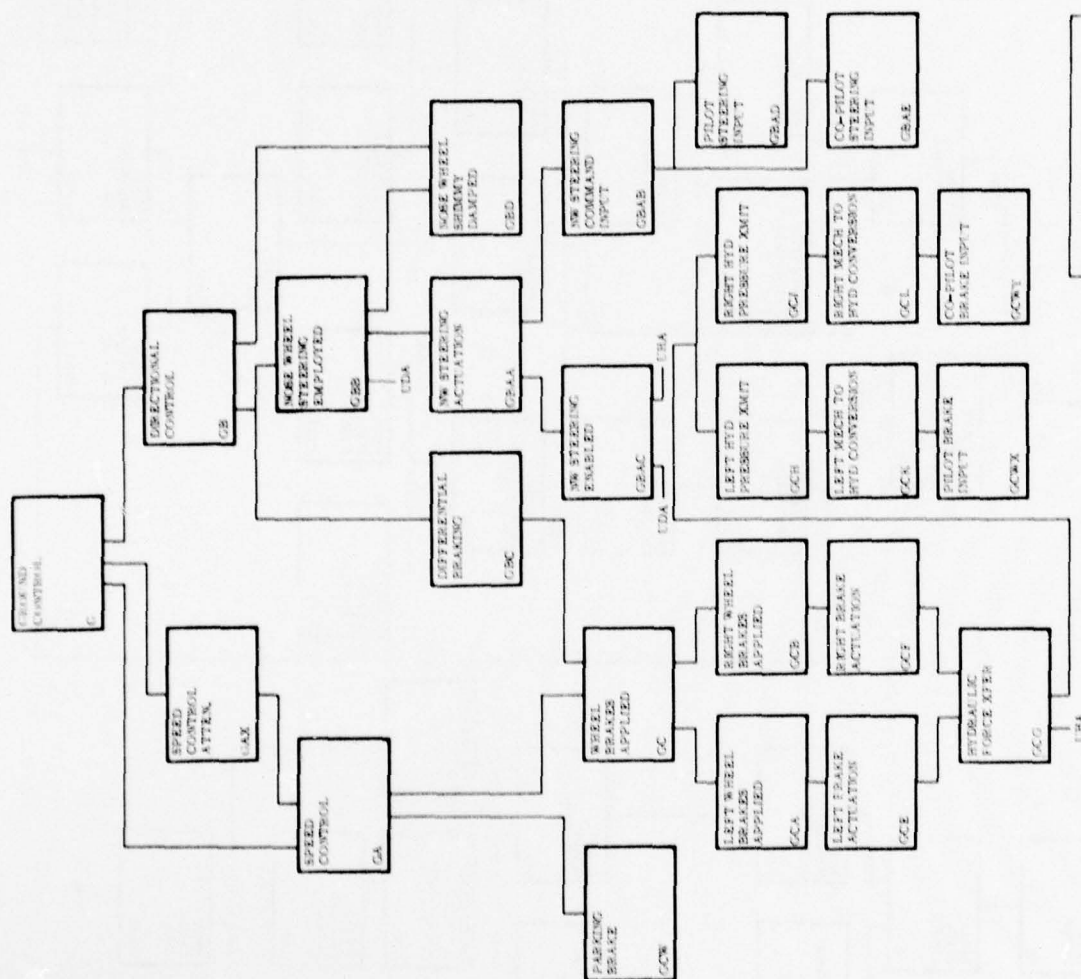


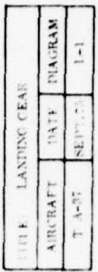
TITLE: C-130 NAV/IDENT			
AIRCRAFT	DATE	DIAGRAM	
C-130	SEPT. 73	C-2	

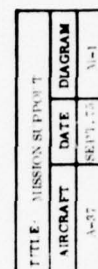


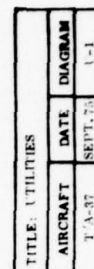












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PGG095.J1R1 DATE = 09/17/75

FLIGHT SAFETY PREDICTION TECHNIQUE

0000000001111111112222222222333333333344444444445555555555666666666677777777778
12345678901234567890123456789012345678901234567890123456789012345678901234567890

37 PROPULSION		B		AAAAAAAAA
A37 BASIC LEFT ENGINE THRUST		BA	B	041111110
T37L. ENGINE THRUST		BA	B	041111120
T37		BA	BDUK	FAAAAAAAAAA
A37 BASIC LEFT ENGINE THRUST		BA	BG	FAAAAAAAAAA
A37 BASIC LEFT ENGINE THRUST		BA	BKU	FAAAAAAAAAA
T37DIFFUSER	23FAA	BAA	BA	A
T37CONE	23FAB	BAB	BA	A
T37TAIL PIPE	23FAC	BAC	BA	A
T37ADJUSTMENT TABS	23FAD	BAD	BA	0
T37CLAMP	23FAE	BAE	BA	A
T37HOUSING REAR BEARING	23FAF	BAF	BD	A
T37REAR BEARING	23FAG	BAG	BD	A
T37REAR BEARING COVER	23FAH	BAH	BD	A
T37REAR BRNG.LABYRINTHSEAL.HSNG	23FAJ	BAJ	BD	2
T37REAR BEARING LABYRINTH SEAL	23FAK	BAK	BD	2
T37REAR BEARING STUDDING ASSY.	23FAL	BAL	BD	A
T37SPIDER ASSEMBLY	23FAM	BAM	BD	1
T37REAR BEARING SUPPORT	23FAN	BAN	BD	A
A37 ENGINE DRAIN LINE	23PAE	BAP	BA	1
A37 STARTER COVER DUCT	23PAD	BAQ	BA	0
A37 QUICK DISCONNECT	23PAC	BAR	BA	1
A37 FRONT ENGINE MOUNT	23PAB	BAS	BA	8
A37 ENGINE TRUNNION MOUNTS	23PAA	BAT	BA	8
A37 TAIL PIPE CLAMP	23PAU	BAU	BA	1
A37 TAIL PIPE	23DAT	BAV	BA	8
A37 EXHAUST CONE,CASING	23DAS	BAW	BA	5
A37 STRUT CENTER BODY	23DAB	BAX	BA	A
A37 THERMOCOUPLE BOSS	23DAC	BAY	BA	0
A37 CENTER BODY EXHAUST	23CAA	BAZ	BA	A

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000000000111111111222222222333333333344444444445555555555666666666677777777778
12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 COMBUSTION 88 BA AAAAAAAAAA
T37L. ENGINE COMBUSTION 88 BA AAAAAAAAAA
T37 ENGINE COMBUSTION 88 BD FAAAAAAAAA
T37 ENGINE COMPRESSION 88 BB AAAAAAAAAA
A37 AFT INNER FLANGE 23BEV 88A BB 0
T37 ENGINE COMPRESSION 88A EAAH F555555555
T37AIR INDUCTION 88AA 88A AAAAAAAAAA
T37BAFFLE 23BAA 88AAA 88AA 1
T37DUCT AIR INTAKE 23BAB 88AAB 88AA 1
T37TUBE 23BAC 88AAC 88AA 1
T37HOUSING ASSEMBLY 23BAD 88AAD 88AA 1
T37GUIDE VANE STRUT 23BAE 88AAE 88AA 1
T37CASE 23BAF 88AAF 88AA 1
T37 TORQUE TUBE 23LAH 88AAG 88AA 1
T37 TORQUE TUBE 23LAH 88AAH 88AA 1
T37 BEARING BLOCK 23LAL 88AAJ 88AA 1
T37HOUSING COMPRESSOR 23CAA 88AB 88A A
T37COMPRESSOR ROTOR ASSEMBLY 23CAB 88AC 88A A
T37COMPRESSOR ROTOR 23CAC 88AD 88A A
T37COMPRESSOR INDUCER 23CAD 88AE 88A A
T37CAGE TURBINE SHAFT FWD. BRNG 23CAE 88AF BD A
T37BEARING MAIN THRUST 23CAF 88AG BD A
T37HOUSING MAIN THRUSTOIL SEAL 23CAG 88AH BDA A
T37OIL SEAL 23CAH 88AJ BDA A
T37HSG.ACC.DRIVE SHAFT GEAR BNG 23CAJ 88AK BE A
T37BEARING BALL 23CAK 88AL BD A
T37BEARING ROLLER 23CAL 88AM BD 1
T37COUPLING 23CAN 88AN 88A A
T37RADIAL DIFFUSER 23CAP 88AP 88A A
T37COMPRESSOR COVER 23CAQ 88AQ 88A A
T37COMPRESSOR COVER LAB.SEAL 23CAR 88AR BD A
T37FRONT SHAFT LABYINTH SEAL 23CAS 88AS 88A 2
T37FIRE SEAL 23CAT 88AT BD A
T37STARTER ADAPTER 23BAG 88AU BDE A
A37 STAGE 8 VANE RETAINER 23BEZ 88AV BB 0
T37STARTER DRIVE AIR INLET SECT 23BAH 88AV BDE A
T37ENGINE MOUNT &LEFT< 23KAC 88AW BA 2
A37 COMB SECTION STRUT 23BEY 88AW BB 2
T37ENGINE MOUNT (RIGHT) 23KAC 88AX BA 2
A37 INNER BAND 23BEX 88AX BB 0
T37ENGINE MOUNT &REAR< 23KAC 88AY BA 2
A37 OUTER BAND 23BEW 88AY BB 0
A37 AFT OUTER FLANGE 23BEU 88AZ BB 0
T37L. ENGINE IGNITION 88B BB T 00AAAAAAAAO
A37 INNER FWD FLANGE 23BET 88B BB 0
T37 ENGINE FUEL CONTROL 88BA BB T 00AAAAAAAAO
T37IGNITION SELECT 88BA 88B FAAAAAAAAA
T37 IGNITION SELECT 88BA 88B FAAAAAAAAA
T37IGNITION SWITCH 42236 88BAA 88B A
T37IGNITION COIL 23JAC 88BB 88B A

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1234567890123456789012345678901234567890123456789012345678901234567890
T37 FUEL FLOW INDICATED                    88DX                    88DG                    111111111
T37 FUEL FLOW TRANSMITTER                23MCB                88DX                    5
T37 FUEL FLOW INDICATOR                23MCA                88DXZ                    3
A37    SCAVENGE PAD                    23BEQ                88E                    0
T37HOUSING TURBINE                    23DAA                88E                    A
A37    BLEED AIR PAD                    23BEP                88F                    0
T37AXIAL DIFFUSER                    23DAB                88F                    5
A37    LEAKAGE AIR DUCT PAD            23BEN                88G                    0
T37ADAPTER                    23DAC                88G                    2
A37    FUEL NOZZLE PAD 12 EACH        23BEM                88H                    2
T37DRAIN                    23DAU                88H                    0
A37    GEARBOX SUPPORT BRACKET        23BEL                88J                    A
T37INNER SHELL                    23DAE                88J                    5
A37    HEAT SHIELD                    23BEK                88K                    5
T37OUTER SHELL                    23DAP                88K                    5
A37    COMBUSTION VIEWPORT COVER    23BFQ                88L                    0
T37PRIMARY AIR SWIVEL VANE            23DAG                88L                    5
A37    COMBUSTOR DRAIN BOSS            23BFP                88M                    5
T37INTERMEDIATE LABYRINTH SEAL        23DAH                88M                    2
A37    IGNITER PLUG BOSS            23BFN                88N                    5
T37HOSE CDP                    23DAJ                88N                    5
A37    LOWER SHAFT SHLD INS BLKT    23BFM                88P                    0
T37FILTER CDP                    23DAK                88P                    2
A37    UPPER SHAFT SHLD INS BLKT    23BFL                88Q                    0
T37FUEL DISTRIBUTOR                    23EAK                88Q                    A
A37    SHAFT SHIELD                    23BFK                88R                    0
T37FUEL DISTRIBUTOR TUBE            23EAL                88R                    A
A37    INNER COMBUSTION CASING        23BFJ                88S                    0
T37BUSHING FUEL TUBE NOZZLE            23EAM                88S                    A
A37    INNER COMBUSTION SHELL        23BFG                88T                    0
T37REAR ENGINE MOUNT BOLT            23KAG                88T                    A
A37    OUTER COMBUSTION SHELL        23BFF                88U                    0
A37    COWL AND DOME ASSY            23BFE                88V                    0
A37    COMBUSTION LINER ASSY        23BFD                88W                    8
A37    LOWER INSULATION BLANKET    23BFC                88X                    2
A37    UPPER INSULATION BLANKET    23BF8                88Y                    2
A37    CASING OUTER                    23BFA                88Z                    8
A37    COMPRESSION                    BC                    8A                    AAAAAAAAAA
A37    COMPRESSION                    BC                    8B                    FAAAAAAAAA
A37    COMPRESSION                    BC                    8S                    FAAAAAAAAA
A37    COMPRESSION                    BC                    BVBC                  F111111111
A37    BLEED VALVE MOUNT PAD        23BBY                BCA                    1
A37    COMPRESSOR SPACER STAGE 6    23BCN                BCAA                    0
A37    COMPRESSOR SHAFT AND SEAL    23BC8                BCAA                    0
A37    STAGE 1 RETAINING RING        23BC7                BCAA                    0
A37    STAGE 1 RETAINING PIN        23BC6                BCAA                    0
A37    RUBBING SEAL RUNNER AFT        23BC3                BCAA                    0
A37    COMPRESSOR DRIVE SHAFT        23BC2                BCAA                    0
A37    COMPRESSOR BLADE STAGE 8    23BC1                BCAA                    0
A37    COMPRESSOR BLADE STAGE 7    23BCZ                BCAA                    0

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 COMPRESSOR BLADE STAGE 6 23BCY BCAAS BC 0
A37 COMPRESSOR BLADE STAGE 5 23BCX BCAAT BC 0
A37 COMPRESSOR BLADE STAGE 4 23BCW BCAAU BC 0
A37 COMPRESSOR BLADE STAGE 3 23BCV BCAAU BC 0
A37 COMPRESSOR BLADE STAGE 2 23BCU BCAAU BC 0
A37 COMPRESSOR BLADE STAGE 1 23BCT BCAAX BC 0
A37 LABYRINTH SEAL STAGE 8 23BCS BCAAY BC 0
A37 COMPRESSOR SPACER STAGE 7 23BCQ BCAAZ BC 0
A37 COMPRESSOR SPACER STAGE 5 23BCL BCAB BC 0
A37 COMPRESSOR SPACER STAGE 4 23BCJ BCAC BC 0
A37 COMPRESSOR SPACER STAGE 3 23BCG BCAD BC 0
A37 COMPRESSOR SPACER STAGE 2 23BCE BCAE BC 0
A37 BLEED HOLE 23BB7 BCAEJ BC 0
A37 DISK STAGE 8 23BCR BCAF BC 0
A37 DISK STAGE 7 23BCP BCAG BC 0
A37 DISK STAGE 6 23BCM BCAH BC 0
A37 DISK STAGE 5 23BCK BCAJ BC 0
A37 DISK STAGE 4 23BCH BCAK BC 0
A37 DISK STAGE 3 23BCF BCAL BC 0
A37 DISK STAGE 2 23BCD BCAM BC 0
A37 SHAFT DISK STAGE 1 23BCC BCAN BC 0
A37 SEAL LABYRINTH 23BCB BCAP BC 0
A37 RUBBER RUNNING SEAL 23BCA BCAQ BC 3
A37 COMPRESSOR ROTOR ASSY 23BCO BCAR BC A
A37 STATOR VANE KEY 23BB8 BCAS BC 1
A37 BODY BOLT HOLES 23BH6 BCAT BC 0
A37 AIR SCROLL 23BB5 BCAU BC 0
A37 COMPRESSOR BLADE LAND 23BB4 BCAV BC 0
A37 HORIZONTAL FLANGE 23BB3 BCAW BC 0
A37 AFT FLANGE 23BB2 BCAX BC 0
A37 FORWARD FLANGE 23BB1 BCAY BC 0
A37 INSULATION BLANKET 23BBZ BCAZ BC 0
A37 COMP SHROUD STAGE 2 23BBX BCB BC 0
A37 COMP SHROUD STAGE 1 23BBV BCC BC 0
A37 STAGE 2 RING SHROUD 23BBW BCD BC 0
A37 STAGE 1 RING SHROUD 23BBU BCE BC 0
A37 VANE SEGMENT STAGE 2 23BBN BCF BC 0
A37 VANE SEGMENT STAGE 1 23BBL BCG BC 0
A37 VANE SEGMENT STOP STAGE 7 23BBT BCH BC 0
A37 VANE SEGMENT STOP STAGE 6 23BBS BCJ BC 0
A37 VANE SEGMENT STOP STAGE 5 23BBR BCK BC 0
A37 VANE SEGMENT STOP STAGE 4 23BBQ BCL BC 0
A37 VANE SEGMENT STOP STAGE 3 23BBP BCM BC 0
A37 VANE SEGMENT STOP STAGE 2 23BBM BCN BC 0
A37 VANE SEGMENT STOP STAGE 1 23BBK BCP BC 0
A37 STAGE 7 STATOR SECTOR 23BBJ BCQ BC 0
A37 STAGE 6 STATOR SECTOR 23BBH BCR BC 0
A37 STAGE 5 STATOR SECTOR 23BBG BCS BC 0
A37 STAGE 4 STATOR SECTOR 23BBF BCT BC 0
A37 STAGE 3 STATOR SECTOR 23BBE BCU BC 0

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 STAGE 2 STATOR SECTOR 2388D BCV BC 0
A37 STAGE 1 STATOR SECTOR 2388C BCW BC 0
A37 COMP CASING LOWER HALF 2388B BCX BC A
A37 COMP CASING UPPER HALF 2388A BCY BC A
A37 COMPRESSOR STATOR ASSY 23880 BCZ BC A
A37 FUEL DELIVERY BD BB AAAAAAAAAA
T37L. ENGINE ROTATION BD RBA AAAAAAAAAA
T37 ENGINE ROTATION BD BE FAAAAAAAAA
T37L. ENGINE COOLING OIL DIST. BDA BD 99999999
T37ANTILEAK VALVE 23HAJ BDA BDA 1
T37OIL PRESSURE LINE 23HAN BDA BDA A
T37OIL SCAVANGE LINES 23HAP BDAC BDA 1
T37OIL FILTER ASSY 23HAC BDA BD 5
T37QUICK DISCONNECT 23KAD BDA BDA A
T37L. ENGINE COOLING OIL REG. BDB BOA 55555555
T37BY-PASS VALVE 23HAE BDB BDB A
T37PRESSURE REGULATOR VALVE 23HAM BDB BDB A
T37 ENGINE OIL PRESS. BDC BDA AAAAAAAAAA
T37L. ENGINE OIL PRESSURIZATION BDC BDB FAAAAAAAAA
T37 ENGINE OIL PRESSURIZED BDC BDX FAAAAAAAAA
T37PUMP ASSEMBLY OIL 23HAB BDCA BDC A
T37SHAFT OIL PUMP 23HAD BDC BDC A
A37 FUEL PRESSURE & DRAINED BDD RD 100000001
T37L. ENGINE OIL SUPPLY BDD BDC AAAAAAAAAA
T37ACCUMULATOR DRAIN VALVE 23HAF BDD BDD C
T37ACCESSORY ACCUMULATOR 23HAG BDB BDB 1
T37OIL TANK 23HAK BDD BDD A
T37OIL TANK FILLER 23HAL BDD BDD 0
T37OIL TANK PENDULOUS HOSE 23HAM BDD BDD A
T37OIL SUPPLY LINE 23HAQ BDD BDD A
T37ANTILEAK VALVE 23AAR BDD BDD 1
A37 PRESS./DRAIN VALVE ASSY 23EAC BDD BDD A
A37 FUEL CONTROL AND DIST. BA BA SAAAAAAAAA
T37START TORQUE BDE BD T 000000000
A37 FUEL CONTROL AND DIST. BDE BDD FAAAAAAAAA
A37 FUEL CONTROL AND DIST. BDE BDG FAAAAAAAAA
A37 FUEL CONTROL AND DIST. BDE BDxZ FAAAAAAAAA
A37 FUEL CONTROL AND DIST. BDE BLD FAAAAAAAAA
A37 FUEL CONTROL AND DIST. BDE BVRB FAAAAAAAAA
T37STARTER COVER 23KAB BDE BDE 1
A37 HIGH PRESSURE FUEL FILTER 23EAK BDE BDE 0
A37 FUEL HOSE 23EAL BDE BDE 2
A37 FUEL CONTROL TUBE 23EAK BDE BDE 2
A37 FUEL CONTROL FILTER 23EAG BDE BDE 0
A37 FUEL CONTROL 23EAA BDE BDE A
T37 ENGINE START SELECT BDF BBBA AAAAAAAAAA
A37 FUEL PRESSURE GENERATED BDF BDE AAAAAAAAAA
T37L. ENGINE START SELECT BDF BDE FAAAAAAAAA
T37SWITCH STARTER 42235 BDF BDF A
T37STARTER RELAY 42213 BDF BDF A

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 FUEL PUMP FILTER 23EAM BDFX BDF 0
A37 FUEL PUMP 23EAB BDFZ BDF A
T37INLET NOZZLE TURBINE 23EAA BDG BO A
A37 OVERSPEED CONTROLLED BDG BDE 011111110
A37 ENGINE GOVERNOR 23EAJ BDGZ BDG 2
T37TURBINE ROTOR HUB 23EAB BDH BD 2
A37 FUEL PRESSURE SENSED BDH BDE AAAAAA
T37BLADES 23EAC BDJ BD A
A37 COMPRESSOR INLET TEMP SENSE BDJ BDE 555555555
A37 SENSOR WIRE HARNESS 23HAG BDJY BDJ 5
A37 T-2 SENSOR 23HAM BDJZ BDJ A
T37FRONT SHAFT 23EAD BDK BD A
T37INTERMEDIATE SHAFT 23EAE BDL BD A
T37REAR SHAFT 23EAF BDM BD A
T37BALANCE ASSEMBLY 23EAG BDN BD 5
T37DISC TURBINE LABYINTH 23EAH BDP BD 5
T37COMPRESSOR SPACER 23EAJ BDQ BD 2
T37 TACHOMETER INDICATION BDUG BB DG 111111111
T37 TACHOMETER INDICATOR 23MAA BDUG BDUG 8
T37 EXHAUST GAS TEMP IND BDUH BB DG 111111111
T37 EXHAUST GAS TEMP INDICATOR 23MDA BDUHA BDUH A
T37 TACHOMETER SIGNAL GENERATR BDUG BB DG AAAAAA
T37 TACHOMETER GENERATOR 23JAB BDUJA BDUG 8
T37 EXHAUST GAS TEMP SENSED BDUK BDUH AAAAAA
T37 EXHAUST GASSPOOL RESISTOR 23MDB BDUKA BDUK 8
T37 THERMOCOUPLE HARNESS 23MDC BDUKB BDUK 8
T37 THERMOCOUPLE PROBE 23MDD BDUKC BDUK 8
T37 FIREWALL CONNECTOR 23MDE BDUKD BDUK 8
A37 LFT FUEL NOZZLES 6 EACH 23EAF BDW BB 1
A37 LFT FUEL NOZZLE MANIFOLD 23EAE BDY BB A
T37 OIL PRESSURE INDICATED BDY BB DG 222222222
A37 FUEL FLOW INDICATED BDXX BR I BDF 555555555
A37 FUEL FLOW INDICATOR 23KDD BDXXZ BDXX 3
T37 OIL PRESSURE TRANSMITTER 23MBB BDXY BDX 5
T37 OIL PRESSURE INDICATOR 23MBA BDYZ BDX 3
A37 FUEL FLOW SENSED AND XMITTD BDYZ BDXX AAAAAA
A37 FUEL FLOW XMITTER 23KDB BDYZZ BDYZ 7
A37 RT FUEL NOZZLES 6 EACH 23EAF BDY BB 1
A37 RT FUEL NOZZLE MANIFOLD 23EAD BDZ BB A
T37 ENG. ACCESSORY DRIVE BE BB SAAAAA
T37 ENG. ACCESSORY DRIVE BE BBDA FAAAAA
T37 ENG. ACCESSORY DRIVE BE BBDC FAAAAA
T37 ENGINE ACCESSORY DRIVE BE BBDF FAAAAA
T37L. ENGINE ACCESSORY DRIVE BE BDC FAAAAA
T37 ENG. ACCESSORY DRIVE BE BDJ FAAAAA
T37 ENG. ACCESSORY DRIVE BE UDG AAAAAA
T37 ENG. ACCESSORY DRIVE BE UHAB AAAAAA
A37 IGNITION SUPPLIED BEA BB T OAAAAA
T37HOUSING ACCESSORY DRIVE CASE23AAA BEA BE A
A37 IGNITION CIRCUIT BREAKER 23HAZ BEAX BEA 5

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1234567890123456789012345678901234567890123456789012345678901234567890
A37 PLUG MAIN IGNITOR 23HAD BEAY BEA 2
A37 LEAD MAIN IGNITION 23HAB BEAZ BEA 2
T37GEAR ACCESSORY DRIVEN SPRU 23AAB BEB BE A
A37 IGNITION GENERATED BEB BEA AAAAAAAAAA
A37 IGNITION EXCITER 23HAA BEBZ BEB A
T37SPACER 23AAC BEC BE 1
A37 IGNITION CONTROLLED BEC BEB AAAAAAAAAA
A37 IDLE CUT OFF SWITCH 9923A BECZ BEC 5
A37 IGNITION POWER DISTRBTED BED BEC AAAAAAAAAA
T37SHAFTGEAR STARTER/GEN. DRIVE23AAD BED UDG A
A37 IGNITION CONTROL RELAY 23HAY BEDZ BED 5
T37GEAR ASSY FUEL PUMP DRIVEN 23AAE BEE BBUF A
A37 IGNITION HOLD TIMING BEE BED 111111111
A37 TIME DELAY RELAY 23HA1 BEEZ BEE 5
T37GEAR FUEL PUMP DRIVEN 23AAF BEF BRDF A
A37 ENGINE START COMMAND BEF BED AAAAAAAAAA
T37GEAR FUEL CONTROL UNIT IDLER23AAG BEG BBDA A
A37 LEFT START COMMAND BEG BEH BEH 111111111
A37 PILOT START SWITCH 42235 BEGZ BEG A
T37GEAR FUEL CONTROL UNIT DRIVE23AAH BEH BBOA A
A37 RIGHT START COMMAND BEH BEF 111111111
A37 CO-PILOT START SWITCH 42235 BEHZ BEH 2
T37GEAR FUEL PUMP DRIVE 23AAJ BEJ BRUF A
A37 IGNITION POWER CONTROLLED BEK BED AAAAAAAAAA
T37GEAR FLUID POWER PUMP DRIVE 23AAK BEK UHAB A
A37 POWER TRANSFER RELAY 42213 BEKZ BEK 7
T37GEAR OIL PUMP DRIVE SPUR 23AAL BEL BDC A
T37SHAFTGEAR OIL PUMP DVN.BVL. 23AAM BEM BDC A
T37BEARING BALL 23AAN BEN BE A
T37SHAFT ACCESSORY DRIVE 23AAP BEP BE A
T37SHAFT GEAR OIL PUMP DRIVE 23AAQ BEQ BDC A
T37COVER ACCESSORY DRIVE 23AAS BER BE 1
T37GEAR TACHOMETER DRIVE 23AAV BES BDUF A
A37 ENGINE FUEL DELIVERED BF B SOBAAAAA60
T37 ENGINE FUEL DELIVERED BF B SOBAAAAA60
T37 ENGINE FUEL DELIVERED BF BBUD FAIAIAIAIAIA
A37 ENGINE FUEL DELIVERED BF BQA FAIAIAIAIAIA
A37 MAIN FUEL SUPPLIED BF BF FAIAIAIAIAIA
A37 MAIN FUEL SUPPLIED BFA BFAX FAIAIAIAIAIA
A37 MAIN FUEL SUPPLIED BFA BFN FAIAIAIAIAIA
T37 FUEL BOOST ACTIVATION BFA BFX AAAAAAAAAA
A37 MAIN FUEL QUANTITY SENSED BFA BFG 777777777
A37 FUSE-TANK QUANTITY PROBE 51722 BFAXZ BFAX A
A37 DE-FUELING VALVE 46223 BFAY BFA 0
A37 FUSELAGE FUEL CELL 46121 BFAZ BFA A
T37 BOOST PUMP SWITCH 46316 BFAZ BFA 2
A37 RESERVOIR 46112 BFAZZ BFA 2
T37 MAIN FUEL SUPPLIED BFB RF AAAAAAAAAA
A37 FUEL TRANSFERRED BFB RFA 008888800
T37FUSELAGE CELL 46121 BFB BFB A

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
T37DEFUELING VALVE 46223 BFB8 0550 BFB 0
T37FUSELAGE VENT VALVE 46227 BFB8 BFB 2
A37 SELECTOR VALVE 46222 BFBX BFB A
A37 FOUR LEVEL FLOAT SW 46315 BFBY BFB A
A37 FUEL SELECTOR RELAY 46215 BFBZ BFB 5
A37 WING FUEL TRANSFERRED BFC BFB 000577555
T37 WING FUEL TRANSFER BFC BFB CC8888800
A37 GRAVITY FUEL TRANSFER BFC K BFCB AAAAAAAAAA
A37 ANNUNCIATOR PANEL 4431A BFCAX BFCAX 2
A37 MASTER CAUTION LIGHT 4431B BFCAX BFCAX 1
A37 GRAVITY TRANS LIGHT 4431A BFCAY BFCAX 1
A37 BY-PASS VALVE, GRAVITY 46224 BFCBZ BFCAX A
A37 PROPORTIONAL TRANSFER BFCB BFC BFCB 111111111
A37 PROPORTIONAL TRANSFER BFCB BFD AAAAAAAAAA
A37 BY-PASS VALVE, PROP FEED 46224 BFCBZ BFCB 5
A37 FUEL PROPORTIONER 2EA 46212 BFCBY BFCB 2
A37 PROPORTIONER MOTOR 2EA 46312 BFCBZ BFCB 1
T37 MOTORIZED SHUTOFF VALVES 46228 BFCZ BFC 5
A37 PYLON FUEL TRANSFERRED BFD BFB 001000000
T37 GRAVITY TRANSFER BFD BFC K BFB AAAAAAAAAA
A37 PYLON FUEL AVAILABLE BFD BFD AAAAAAAAAA
T37 GRAVITY FEED 46224 BFD BFD 8
A37 PYLON FUEL AVAILABLE BFDAX BFDAX FAAAAAAAAA
A37 PYLON FUEL AVAILABLE BFDAY BFDAY FAAAAAAAAA
A37 PYLON FUEL LEVEL SENSED BFE BFE 111111111
A37 4-LEVEL FLOAT SWITCH 46315 BFDAX BFDAX A
A37 PYLON FUEL JETTISON BFDAY FAB F00000000
A37 PYLON SUPPLY AVAIL EA WING BFD BFD 555555555
A37 INTM PYLON AIR TUBE 46136 BFD8J BFD8 5
A37 INTM PYLON QWIK DCNX 46134 BFD8K BFD8 2
A37 INTM PYLON FIN 46133 BFD8L BFD8 0
A37 INTM PYLON TANK 46132 BFD8M BFD8 A
A37 INTM PYLON SWAYBRACE 1131D BFD8N BFD8 2
A37 INTM PYLON FAIRING 1131C BFD8P BFD8 0
A37 INTM PYLON 1131B BFD8Q BFD8 8
A37 INBD PYLON AIR TUBE 46136 BFD8R BFD8 5
A37 INBD PYLON QWIK DCNX 46134 BFD8S BFD8 2
A37 INBD PYLON TANK FIN 46133 BFD8T BFD8 0
A37 INBD PYLON TANK 46132 BFD8U BFD8 A
A37 INBD PYLON SWAYBRACE 1131D BFD8V BFD8 2
A37 INBD PYLON FAIRING 1131C BFD8W BFD8 0
A37 INBD PYLON 1131B BFD8X BFD8 8
A37 BY-PASS TUBE ASSY 9946H BFD8Y BFD8 5
A37 CROSS-OVER TUBE 9946G BFD8Z BFD8 5
T37 GRAVITY FEED MICRO SWITCH 46317 BFDX BFD 2
T37 FUEL LEVEL SENSED BFE BFD 111111111
T37 FUEL LEVEL SENSED BFE BFXW FAAAAAAAAA
A37 FUEL MGT INFO PROVIDED BFE BFX Y AAAAAAAAAA
T37 FLOAT SWITCH ASSEMBLY 4631B BFE BFE 8
T37 LOW LEVEL RELAY 4631A BFE BFE A

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37  ANUNCIATOR PANEL          4431A  BFEZ      BFE      2
A37  TRANSFER SOURCE SELECT      BFF      BFB      777777777
A37  TRANSFER SOURCE SELECT      BFF      BFC      FAAAAAAAAA
A37  TRANSFER SOURCE SELECT      BFF      BFD      FAAAAAAAAA
A37  TRANSFER SOURCE SELECT      BFF      BFE      F11111111
A37  TRANSFER SOURCE SELECT      BFF      BFWB     FAAAAAAAAA
A37  TRANSFER SOURCE SEL SW  4631B  BFFZ      BFF      2
A37  FUEL QUANTITY DATA DISP      BFG      BFXX     AAAAAAAAAA
A37  TRANSFER RELAY          51726  BFGV      BFG      5
A37  FUEL IND. TEST SWITCH  51725  BFCW      BFG      0
A37  FUEL IND. POWER UNIT  51724  BFGX      BFG      A
A37  FUEL QTY SELECT SWITCH  51723  BFGY      BFG      5
A37  FUEL QTY INDICATOR    51721  BFGZ      BFG      3
T37  PROPORTIONAL TRANSFER      BFH      BFC      8FU  111111111
A37  WING FUEL QUANTITY SENSED      BFH      BFG      333333333
T37PROPORTIONER PUMP          46212  BFHA      BFH      8
T37PROPORTIONER MOTOR        46312  BFHB      BFH      8
A37  RIGHT CELL 2 QTY PROBE  51722  BFHW      BFH      2
A37  RIGHT CELL 5 QTY PROBE  51722  BFHX      BFH      2
A37  LEFT CELL 2 QTY PROBE  51722  BFHY      BFH      2
A37  LEFT CELL 5 QTY PROBE  51722  BFHZ      BFH      2
A37  GRAVITY FUEL SELECT      BFJ      BFCA     111111111
T37  CONTROLLED FUEL TRANSFER      BFJ      BFH      AAAAAAAAAA
A37  GRAVITY FEED RELAY          46313  BFJY      BFJ      A
T37  FLOAT SW ASSY  4631C  4631B  BFJZ      BFJ      8
A37  GRAVITY FUEL SEL SWITCH  46311  BFJZ      BFJ      A
T37  FLOAT SW ASSY  4631B  4631C  BFJZA     BFJ      8
A37  FAIL SAFE GRAVITY XFER      BFK      BFCA     111111111
T37  TRANSFER SELECT          BFK      BFD      FAAAAAAAAA
T37  TRANSFER SELECT          BFK      BFJ      AAAAAAAAAA
T37GRAVITY SWITCH          46311  BFKA      BFD      8
T37GRAVITY FEED RELAY        46313  BFKB      BFD      5
A37  FLOAT SWITCH ASSY  L-4  46315  BFKZ      BFK      A
T37  WING FUEL SUPPLY          BFL      BFC      SAAAAAAAAA
T37WING FUEL SUPPLY          BFL      BFD      FAAAAAAAAA
T37WING FUEL SUPPLY          BFL      BFJ      FAAAAAAAAA
A37  FUEL LOW WARNING          BFM      BFG      111111111
T37RIGHT WING FUEL SUPPLY      BFM      BFL      555555555
T37 RIGHT WING FUEL SUPPLIED      BFM      BFXV     FAAAAAAAAA
T37RIGHT LEADING EDGE CELL#2  46125  BFMA      BFM      5
T37INTERCONNECT #4 TO #2      46114  BFMAA     BFM      5
T37CHECK VALVE #4 TO #2      46226  BFMAB     BFM      0
T37VENT LINE #4 TO #2        46116  BFMAC     BFM      0
T37RIGHT INTERSPAR CELL #4    46124  BFMB      BFM      5
T37INTERCONNECT #5 TO #4      46114  BFMBB     BFM      2
T37INTERCONNECT 15 TO 14      46114  BFMBB     BFM      2
T37INTERCONNECT 13 TO 14      46114  BFMBB     BFM      2
T37CHECK VALVE 15 TO 14      46226  BFMBD     BFM      0
T37CHECK VALVE 15 TO 14      46226  BFMBE     BFM      0
T37CHECK VALVE 13 TO 14      46226  BFMBF     BFM      0

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
T37VENT LINE 15 TO 14 46116 BFM BG BFM 2
T37ACCESS COVER CELL 14 46115 BFM BH BFM 0
T37RIGHT INTERSPAR CELL 15 46124 BFM C BFM 4
T37INTERCONNECT 16 TO 15 46114 BFM CA BFM 1
T37INTERCONNECT 16 TO 15 46114 BFM CB BFM 1
T37CHECK VALVE 16 TO 15 46226 BFM CC BFM 0
T37CHECK VALVE 16 TO 15 46226 BFM CD BFM 0
T37VENT LINE 16 TO 15 46116 BFM CE BFM 2
T37ACCESS COVER CELL 16 46115 BFM CF BFM 0
T37RIGHT TIP TANK 13 46126 BFM D BFM 4
T37INTERCONNECT 16 TO 13 46114 BFM DA BFM 2
T37CHECK VALVE 16 TO 13 46226 BFM DB BFM 0
T37VENT LINE 17 TO 13 46116 BFM DC BFM 2
T37PLUNGER ROD FILLER CAP 46111 BFM DD BFM 0
T37FILLER CAP 46113 BFM DE BFM 5
T37DUMP TIP TANK 4622C BFM DF BFM 5
T37FILLER ASSEMBLY 46117 BFM DG BFM 0
T37RIGHT INTERSPAR CELL 16 46124 BFM E BFM 2
T37INTERCONNECT 17 TO 16 46114 BFM EA BFM 2
T37INTERCONNECT 17 TO 16 46114 BFM EB BFM 2
T37CHECK VALVE 17 TO 16 46226 BFM EC BFM 0
T37CHECK VALVE 17 TO 16 46226 BFM ED BFM 0
T37VENT LINE 17 TO 16 46116 BFM EE BFM 2
T37ACCESS COVER CELL 16 46115 BFM EF BFM 0
T37RIGHT INTERSPAR CELL 17 46124 BFM F BFM 2
T37WING VENT VALVE 4622A BFM FA BFM 0
T37ACCESS COVER CELL 17 46115 BFM FC BFM 0
A37 ANNUNCIATOR PANEL 4431A BFM X BFM 2
T37 FLOAT SWITCH 4622B BFM X BFM 0
A37 MASTER CAUTION LIGHT 4431B BFM Y BFM 1
A37 FLOAT SWITCH ASSY L-4 46315 BFM Z BFM A
A37 TRANSFER LEVEL CONTROL BFN BFCB AAAAAAAAAA
T37 LEFT WING FUEL SUPPLY BFN BFL 555555555
T37 LEFT WING FUEL SUPPLIED BFN BFX Y FAAAAAAAAA
T37 PLUNGER ROD FILLER CAP 46111 BFN A BFN 0
T37 ACCESS COVER CELL 7 46115 BFN AM BFN 0
T37 WING VENT VALVE 46222 4622A BFN AN BFN 0
T37 LEFT INTERSPAR CELL 7 46122 BFN AP BFN 2
T37 ACCESS COVER CELL 6 46115 BFN AQ BFN 0
T37 VENT LINE 7 TO 6 46116 BFN AR BFN 2
T37 CHECK VALVE 7 TO 6 46226 BFN AS BFN 0
T37 CHECK VALVE 7 TO 6 46226 BFN AT BFN 0
T37 INTERCONNECT 7 TO 6 46114 BFN AU BFN 2
T37 INTERCONNECT 7 TO 6 46114 BFN AV BFN 2
T37 LEFT INTERSPAR CELL 6 46122 BFN AW BFN 2
T37 FILLER ASSY 46117 BFN AX BFN 0
T37 TIP DUMP VALVE 4622C BFN AY BFN 5
T37 FILLER CAP 46113 BFN AZ BFN 0
T37 FLOAT SWITCH 4622B BFN AZZ BFN 0
T37 VENT LINE 7 TO 3 46116 BFN B BFN 2

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T37	CHECK VALVE	6 TO 3	46226	BFNC	BFN	0
T37	INTERCONNECT	6 TO 3	46114	BFND	BFN	2
T37	LEFT TIP TANK	.3	46126	BFNE	BFN	4
T37	ACCESS COVER	5	46115	BFNF	BFN	0
T37	VENT LINE	6 TO 5	46116	BFNG	BFN	2
T37		6 TO 5	46226	BFNH	BFN	0
T37	CHECK VALVE	6 TO 5	46226	BFNJ	BFN	0
T37	INTER CONNECT	6 TO 5	46114	BFNK	BFN	2
T37	INTER CONNECT	6 TO 5	46114	BFNL	BFN	2
T37	LEFT INTERSPAR CELL	5	46112	BFNM	BFN	4
T37	ACCESS COVER CELL	4	46115	BFNN	BFN	0
T37	VENT LINE	5 TO 4	46116	BFNP	BFN	2
T37	CHECK VALVE	3 TO 4	46226	BFNQ	BFN	0
T37	CHECK VALVE	5 TO 4	46226	BFNR	BFN	0
T37	CHECK VALVE	5 TO 4	46226	BFNS	BFN	0
T37		3 TO 4	46114	BFNT	BFN	2
T37	INTER CNX	5 TO 4	46114	BFNU	BFN	2
T37	LEFT INTERSPAR CELL	4	46122	BFNV	BFN	5
T37	VENT LINE #4 TO #2		46116	BFNW	BFN	2
T37	CHECK VALVE #4 TO #2		46226	BFNX	BFN	0
T37	INTER CNX #4 TO #2		46114	BFNY	BFN	5
T37	LEAD EDGE CELL		46123	BFNZ	BFN	5
A37	FLOAT SWITCH ASSY	L-2-346315		BFNZ	BFN	A
A37	NORMAL TRANSFER SELECT			BFP	BFN	AAAAAAAAA
A37	TRANSFER MODE SELECT			BFPA	BFJ	FAAAAAAAAAA
A37	TRANSFER MODE SELECT			BFPA	BFP	AAAAAAAAA
A37	TRANSFER MODE SELECT SW	46318		BFPAZ	BFPA	A
A37	WING INT FUEL AVAILABLE			BFQ	BFH	FAAAAAAAAAA
A37	WING INT FUEL AVAILABLE			BFQ	BFT	888888888
A37	EACH WING SUPPLY AVAILABLE			BFRA	BFQ	555555555
A37	CHECK VALVE CELL 6-5	2EA46226		BFRAA	BFRA	0
A37	FILLER CAP	46113		BFRAAS	BFRA	0
A37	FILLER ASSY	46117		BFRAAT	BFRA	0
A37	ACCESS COVER CELL 7	46115		BFRAAU	BFRA	0
A37	ACCESS COVER CELL 6	46115		BFRAAV	BFRA	0
A37	ACCESS COVER CELL 5	46115		BFRAAW	BFRA	0
A37	ACCESS COVER CELL 4	46115		BFRAAX	BFRA	0
A37	CHECK VALVE CELL 7-6	2E46226		BFRAAY	BFRA	0
A37	CHECK VALVE CELL 6-3	46226		BFRAAZ	BFRA	0
A37	CHECK VALVE CELL 3-5	46226		BFRAB	BFRA	0
A37	CHECK VALVE CELL 3-4	46226		BFRAc	BFRA	0
A37	CHECK VALVE CELL 5-4	2EA46226		BFRAD	BFRA	0
A37	CHECK VALVE CELL 4-2	46226		BFRAE	BFRA	0
A37	VENT LINE CELL 7-6	46116		BFRAF	BFRA	1
A37	VENT LINE CELL 6-3	46116		BFRAg	BFRA	1
A37	VENT LINE CELL 6-5	46116		BFRAH	BFRA	1
A37	VENT LINE CELL 4-5	46116		BFRAJ	BFRA	1
A37	VENT LINE CELL 4-2	46116		BFRAK	BFRA	1
A37	INTER-SPAR CELL 7	46122		BFRAL	BFRA	2
A37	INTER-SPAR CELL 6	46122		BFRAm	BFRA	2

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1234567890123456789012345678901234567890123456789012345678901234567890
A37 INTER-SPAR CELL 5 46122 BFRAN BFRA 2
A37 INTER-SPAR CELL 4 46122 BFRAP BFRA A
A37 LE CELL 32 46123 BFRAQ BFRA 1
A37 LE CELL 2 46123 BFRAR BFRA A
A37 CELL 3- CELL 5 INTCNX 46114 BFRAS BFRA 2
A37 CELL 7- CELL 6 INTCNX 2EA46114 BFRAT BFRA 2
A37 CELL 6- CELL 3 INTCNX 46114 BFRAU BFRA 2
A37 CELL 6- CELL 5 INTCNX 2EA46114 BFRAY BFRA 2
A37 CELL 3- CELL 4 INTCNX 46114 BFRAX BFRA 2
A37 CELL 5- CELL 4 INTCNX 2EA46114 BFRAY BFRA 8
A37 CELL 4- CELL 2 INTCNX 46114 BFRAY BFRA 8
A37 CELL 2- FUSELAGE INTCNX 46114 BFRF BFRA 8
A37 AIRCRAFT REFUELED BFRF BFRA 000001000
A37 AERIAL REFUEL BFRF BFRA AAAAAAAAAA
A37 AERIAL REFUEL BFRF BFRA FAAAAAAAAA
A37 AERIAL REFUEL BFRF BFRA FAAAAAAAAA
A37 RT PYLON FLOAT SWITCH 46421 BFRFAA BFRA 0
A37 RT PYLON CHECK VALVE 46413 BFRFAAX BFRA 0
A37 RT PYLON PRE-CHECK VALVE 46225 BFRFAAY BFRA 0
A37 RT PYLON SHUT-OFF VALVE 9946J BFRFAAZ BFRA 0
A37 RT MAIN CHECK VALVE 46413 BFRFAB BFRA 0
A37 RT MAIN PRE-CHECK VALVE 46225 BFRFAC BFRA 0
A37 RT MAIN SHUT-OFF VALVE 9946J BFRFAD BFRA 0
A37 RT MAIN FLOAT SWITCH 46421 BFRFAE BFRA 0
A37 RT TIP CHECK VALVE 46413 BFRFAF BFRA 0
A37 RT TIP PRE-CHECK VALVE 46225 BFRFAG BFRA 0
A37 RT TIP SHUT-OFF VALVE 9946J BFRFAH BFRA 1
A37 RT TIP FLOAT SWITCH 46421 BFRFAJ BFRA 1
A37 LEFT PYLON CHECK VALVE 46413 BFRFAK BFRA 0
A37 LEFT PYLON PRE-CHECK VALVE 46225 BFRFAL BFRA 0
A37 LEFT PYLON SHUT-OFF VALVE 9946J BFRFAM BFRA 0
A37 LEFT PYLON FLOAT SWITCH 46421 BFRFAN BFRA 0
A37 LEFT MAIN PRE CHECK VALVE 46225 BFRFAP BFRA 0
A37 LEFT MAIN SHUT-OFF VALVE 9946J BFRFAQ BFRA 0
A37 LEFT MAIN FLOAT SWITCH 46421 BFRFAK BFRA 0
A37 LEFT TIP CHECK VALVE 46413 BFRFAS BFRA 0
A37 LEFT TIP PRE-CHECK VALVE 46225 BFRFAT BFRA 0
A37 LEFT TIP SHUT-OFF VALVE 9946J BFRFAU BFRA 1
A37 LEFT TIP FLOAT SWITCH 46421 BFRFAV BFRA 1
A37 AIR REFUEL MANIFOLD 46414 BFRFAW BFRA 5
A37 AIR REFUEL CHECK VALVE 46413 BFRFAX BFRA 0
A37 AIR REFUEL PROBE 46412 BFRFAY BFRA 8
A37 AIR REFUEL BOOM 46411 BFRFAZ BFRA 8
A37 AIR REFUEL CONTROLLED BFRFB BFRA AAAAAAAAAA
A37 AIR REFUEL SWITCH 46421 BFRFBZ BFRA 5
A37 GROUND RE-FUEL BFRFG BFRA 000000000
A37 GRAVITY RE-FUEL BFRFH BFRA 111111111
A37 FILLER CAP 46113 BFRFHY BFRA 1
A37 FILLER ASSY 46117 BFRFHZ BFRA 1
A37 SINGLE POINT REFUEL BFRFJ BFRFG 111111111

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 GROUND REFUEL ADAPTER 9946K BFRFJZ BFRFJ 1
A37 AIR REFUEL DATA DISPLAYED BFRFX BFRFY 111111111
A37 AIR REFUEL LIGHTS 46422 BFRFX2 BFRFX 0
A37 PILOT REFUEL ACTION BFRFY BFRFH 333333333
A37 WING FUEL SUPPLEMENT AV BFS BFSX FAAAAAAAAA
A37 WING FUEL SUPPLEMENT AV BFS BFT 222222222
A37 EACH TIP SUPPLY TRANS BFS BFS 555555555
A37 EACH TIP SUPPLY TRANS BFS BFS FAAAAAAAAA
A37 TIP TANK DUMP VALVE 46228 BFSAS BFS 5
A37 TIP TANK FILLER ASSY 46117 BFSAT BFS 0
A37 TIP TANK VENT LINES 46116 BFS AU BFS 2
A37 TIP TANK TO CELL 7 CNX 46114 BFS AV BFS A
A37 TIP TANK RELAY 46215 BFS AW BFS A
A37 TIP TANK XFER PUMP 46214 BFS AX BFS A
A37 TIP TANK FIN 46135 BFS AY BFS 0
A37 TIP TANK 46131 BFS AZ BFS A
A37 EACH TIP FUEL DUMPED BFS SE FAB K BFS 000000000
A37 DUMP SWITCH 46318 BFS SE BFS A
A37 DUMP VALVE 46228 BFS SE BFS A
T37 FUEL BOOST STATUS BFS T BFS 111111111
T37 BOOST FAIL LIGHT 44317 BFS TY BFS 2
T37 BOOST PUMP PRESS. SWITCH 4631A BFS TZ BFS 5
A37 TIP TANK FUEL QTY SENSED BFSX BFE 111111111
A37 R TIP PRESSURE SWITCH 46317 BFS XY BFS 5
A37 L TIP PRESSURE SWITCH 46317 BFS XZ BFS 5
T37 BYPASS INDICATOR 46234 BFT BF 0
A37 WING FUEL SUPPLY AVAILABL BFT BFC AAAAAAAAAA
A37 POSITIVE FUEL PRESSURE BFT BF AAAAAAAAAA
T37 T-HANDLE 46318 BFT BF 0
A37 GRAVITY PRESSURE AVAILBLE BFUA K BFV AAAAAAAAAA
A37 FLIGHT RESTRICTIONS OBSVD BFUB BFUA AAAAAAAAAA
A37 PILOT ACTION BFUC BFUB AAAAAAAAAA
A37 PILOT ACTION BFUC BFVA FAAAAAAAAA
A37 FUSELAGE VENT VALVE 46227 BFUZ BFU 5
T37 DRAIN VALVE 46233 BFV BF 0
A37 BOOST PUMP PRESSURE SUPP BFV BFUA 111111111
A37 BOOST PUMP PRESSURE SUPP BFV BFVX FAAAAAAAAA
A37 FUEL BOOST PUMP SELECTED BFV BFV 050000000
A37 BOOST PUMP SWITCH 46316 BFVAZ BFVA A
A37 BOOST PUMP STATUS IND BFVX BFV BFV 111111111
A37 ATTENUATER BFVXA BFVX 111111111
A37 ANNUNCIATOR PANEL 4431A BFVXV BFVXA 2
A37 MASTER CAUTION LIGHT 4431B BFVXW BFVX 1
A37 BOOST PUMP PRESS SW 4631A BFVXY BFVX 8
A37 FUEL BOOST OFF LIGHT 4431A BFVXZ BFVX 5
A37 FUEL BOOST PUMP 46211 46213 BFVY BFV 8
A37 FUEL BOOST PUMP 46213 46211 BFVZ BFV 8
T37 RESERVOIR 46112 BFW BF 1
A37 SEAT TANK FUEL AVAILABLE BFWA BFWB AAAAAAAAAA
A37 SEAT TANK ASSY 9946F BFWAZ BFWA A

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 SEAT TANK FUEL TRANSFER BFWB BFB 000000000
A37 SEAT TANK FUEL TRANSFER BFWB BFWC FAAAAAAAAA
A37 SEAT TANK TO FUSL-INTCNX 9946E BFWBX BFWB A
A37 SEAT TANK XFER PUMP 9946D BFWBY BFWB A
A37 SEAT TANK XFER SEL SWITCH 9946C BFWBZ BFWB A
A37 SEAT TANK FUEL STATUS DISP BFWC BFE 111111111
A37 FUEL LEVEL PRESSR SWITCH 46317 BFWCZ BFWC A
T37 FUEL PRESSURE BOOSTED BFX BF 111111111
T37 STRAINER ELEMENT 46232 BFXA BF 1
T37 FUEL LOW WARNING BFXW BFXY AAAAAAAA
T37 FUEL LOW LEVEL LIGHT 44311 BFXWY BFXW 5
T37 FLOAT SWITCH ASSY 4631C 4631B BFXWZ BFXW 8
T37 PILOT ACTION BFXX BFK AAAAAAAA
A37 PILOT ACTION BFXX BR 000000000
A37 PILOT ACTION BFXY BFF AAAAAAAA
A37 PILOT ACTION BFXY BFPA FAAAAAAAAA
T37 FUEL QUANTITY DATA DISPLAY BFXY BFXX 111111111
T37 CONNECTOR 51726 BFXYU BFXY 2
T37 TEST SWITCH 51725 BFXYV BFXY 0
T37 POWER UNIT 51724 BFXYW BFXY 8
T37 SELECT SW 51723 BFXYX BFXY 8
T37 PROBE 2 EA 51722 BFXYY BFXY 2
T37 FUEL QTY INDICATOR 51721 BFXYZ BFXY 2
T37 MAIN FUEL QUANTITY SENSED BFXZ BFXY 555555555
T37 FUEL BOOST PUMP 46211 BFXZA BFX 8
T37 BOOST PUMP DRAIN 46225 BFXZB BFX 0
T37 FUEL QUANTITY PROBE 51722 BFXZZ BFXZ 5
T37 FUEL STRAINER 46231 BFY RF 1
T37 MANUAL SHUTOFF VALVE 46221 BFZ BF 0
A37 MANUAL SHUTOFF VALVE 46221 BFZA BF 0
A37 FUEL STRAINER 46231 BFZB BF 0
A37 FUEL STRAINER ELEMENT 46232 BFZC BF 0
A37 FUEL STRAINER DRAIN VALVE 46233 BFZD BF 0
A37 FUEL STRAINER BAFFLES 46234 BFZE BF 0
A37 FUEL STRAINER LINER 46235 BFZF BF 0
A37 ENGINE ROTATION BG BC AAAAAAAA
A37 ENGINE ROTATION BG BT FAAAAAAAAA
A37 TURBINE ROTOR BLADE,STG 223CBK BGA BG A
A37 SEAL RUBBING 23CA2 BGAD BG 1
A37 ROLLER BEARING 23BAK BGAE BG 2
A37 RUBBING SEAL RUNNER 23CBM BGAF BG 1
A37 TURBINE BAFFLE STG 2 23CBL BGAG BG 0
A37 TURBINE BAFFLE STG 1 23CBH BGAM BG 0
A37 TURBINE TORQUE RING 23CBF BGAG BG 5
A37 LABYRINTH SEAL 23CBC BGAK BG 2
A37 OUTER TURBINE SEAL 23CBB BGAL BG 1
A37 BODY BOUND BOLT HOLES 23CAX BGAM BG 0
A37 AFT CASING FLANGE 23CAV BGAN BG 0
A37 FWD CASING FLANGE 23CAU BGAP BG 0
A37 CARBON RUBBING SEAL 23BEJ BGAQ BG 1

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A37	BEARING SUPPORT SEAL	23BEH	BGAR	BG	1
A37	BALL BEARING OIL NOZZLE	23BEG	BGAS	BG	2
A37	BEARING SUPPORT MI-D	23BEF	BGAT	BG	2
A37	BALL BEARING MI-D	23BEF	BGAU	BG	3
A37	VANE SEGMENT STG 8 STOP	23BED	BGAV	BG	0
A37	VANE SEGMENT STAGE 8	23BEC	BGAW	BG	2
A37	STATIONARY STG 8 SEAL	23BEB	BGAX	BG	1
A37	STATIONARY INNER SEAL	23BEA	BGAY	BG	1
A37	MAIN FRAME ASSEMBLY	23BEO	BGAZ	BG	A
A37	STAGE 2 TURBINE WHEEL	23CBJ	BGB	BG	8
A37	STAGE 1 TURBINE BLADE	23CBG	BGC	BG	A
A37	STATIONARY TURBINE SEAL	23CAE	BGD	BG	1
A37	TURBINE INTER STG SEAL	23CBE	BGE	BG	1
A37	STAGE 1 TURBINE WHEEL	23CBD	BGF	BG	8
A37	REAR RUBBING SEAL	23CBA	BGG	BG	1
A37	TURBINE INLET HEAT SHIELD	23CAY	BGH	BG	2
A37	HORIZONTAL CASING FLANGE	23CAW	BGJ	BG	0
A37	STG 2 PRESS-NOZZLE VANE	23CAT	BGK	BG	3
A37	STG 1 PRESS-NOZZLE VANE	23CAS	BGL	BG	3
A37	A-15 HORN	23CAR	BGM	BG	0
A37	SEAL SUPPORT INS BLANKET	23CAO	BGN	BG	0
A37	STG 2 TURBINE NOZZLE	23CAN	BGP	BG	5
A37	STG 2 SECTOR SHROUD SEAL	23CAM	BGQ	BG	1
A37	STG 2 SECTOR SHROUD	23CAL	BGR	BG	0
A37	STG 1 SECTOR SHROUD SEAL	23CAK	BGS	BG	1
A37	STG 1 SECTOR SHROUD	23CAJ	BGT	BG	0
A37	REAR BEARING SUPPORT	23CAG	BGU	BG	2
A37	REAR ROLLER BEARING	23CAF	BGV	BG	3
A37	REAR SUPPORT SEAL	23CAD	BGW	BG	1
A37	STG 1 TURBINE NOZZLE	23CAC	BGX	BG	5
A37	LOWER TURBINE CASING	23CAB	BGY	BG	A
A37	UPPER TURBINE CASING	23CAA	BGZ	BG	A
A37	EXHAUST GAS TEMP SENSED		BKD	BMAA	AAAAAAAAA
A37	FIRE WALL CNX THERMO HARN	23KDH	BKDW	BKD	5
A37	RESISTOR TRIMMER	23KDP	BKDX	BKD	5
A37	SENSOR WIRING HARNESS	23KUN	BKDY	BKD	5
A37	EGT SENSOR 8 EACH	9923B	BKDZ	BKD	2
A37	OIL DISTRIBUTED		BLA	BG	AAAAAAAAA
A37	OIL DISTRIBUTED		BLA	BX	FAAAAAAAAAA
A37	BEARING OIL NOZZLE	23BAL	BLAS	BLA	2
A37	OIL SLINGER	23BC4	BLAV	BLA	3
A37	CARBON RUBBING SEAL	23BAM	BLAW	BLA	1
A37	OIL FILTER	23FAB	BLAX	BLA	0
A37	REAR RUBBING SEAL	23CBA	BLAY	BLA	1
A37	BALL BEARING OIL NOZZLE	23BEG	BLAZ	BLA	3
A37	OIL PRESS GENERATED		BLB	BLA	AAAAAAAAA
A37	OIL PRESS GENERATED		BLB	BMA	FAAAAAAAAAA
A37	OIL COLLECTOR	23BAJ	BLBW	BLB	0
A37	SCAVENGE AND LUBE TUBE	23FAF	BLBX	BLB	C
A37	SCAVENGE AND AIR TUBE	23FAE	BLBY	BLB	0

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1234567890123456789012345678901234567890123456789012345678901234567890
A37 PUMP ASSEMBLY LUBE/SCAVNG 23FAA BLBZ BLB A
A37 OIL SUPPLIED BLC BLB AAAAAAAAAA
A37 OIL DIP STICK 23FAZ BLC BLB 0
A37 FILLER TUBE 23FAM BLCU BLC 0
A37 TANK DRAIN PLUG 23FAL BLCV BLC 0
A37 TANK FILLER CAP 23FAK BLCW BLC 0
A37 OIL TANK FILLER NECK 23FAJ BLCX BLC 0
A37 OIL PRESS RELIEF VALVE 23FAH BLCY BLC 1
A37 OIL TANK ASSY 23FAG BLCZ BLC A
A37 OIL COOLED BLD BLA 555555555
A37 THERMOSTAT COOLER FLOW 23FAD BLDY BLD 1
A37 OIL COOLER 23FAC BLDZ BLD 3
A37 OIL PRESSURE SENSED XMIT BMA BMAE AAAAAAAAAA
A37 EXHAUST GAS TEMP INDICATED BMAA BR 000000000
A37 EXHAUST GAS TEMP INDICATE 23KDM BMAAZ BMAA 3
A37 OIL PRESSURE INDICATED BMAE BR I BLB 111111111
A37 OIL PRESSURE INDICATOR 23KDK BMAEZ BMAE 3
A37 TRANSMITTER OIL PRESSURE 23KDA BMAZ BMA A
A37 FUEL SUPPLIED BQA BDE AAAAAAAAAA
A37 FUEL SHUTOFF T HANDLE 46318 BQAW BQA 0
A37 ENGINE FUEL MANIFOLD TEE 9946B BQAX BQA 5
A37 ENG SHUTOFF VALVE 46228 BQAY BQA 0
A37 FUEL LINE STRAINER TO FC 9946A BQAZ BQA 1
A37 THROTTLE POSITION BR BDE AAAAAAAAAA
A37 THROTTLE POSITION BR BEC FAAAAAAAAAA
A37 LEFT THROTTLE POSITION BRA BR BRB 111111111
A37 LEFT CABLE ASSY CONTROLEX 11627 BRAT BRA 2
A37 LEFT TORQUE TUBE 11626 BRAU BRA 0
A37 LEFT PUSH-ROD 11625 BRAV BRA 2
A37 LEFT BELLCRANK 11624 BRAW BRA 3
A37 LEFT LINKAGE 11623 BRAX BRA 2
A37 LEFT THROTTLE CONT LEVER 11622 BRAY BRA 1
A37 LEFT THROTTLE QUADRANT 11621 BRAZ BRA 8
A37 RIGHT THROTTLE POSITION BRB BR K BRA AAAAAAAAAA
A37 RIGHT CONTROLEX CABLE ASS 11628 BRBT BRB 2
A37 RIGHT TORQUE TUBE 11626 BRBU BRB 0
A37 RIGHT PUSH-ROD 11625 BRBV BRB 2
A37 RIGHT BELLCRANK 11624 BRBW BRB 3
A37 RIGHT LINKAGE 11623 BRBX BRB 2
A37 RIGHT THROTTLE CONT LEVER 11622 BRBY BRB 1
A37 RIGHT THROTTLE QUADRANT 11621 BRBZ BRB 8
A37 DISCONNECT ROD END 23KBJ BRZ BR A
A37 ENGINE BLEED AIR DIST BS BDM 555555555
A37 ENGINE BLEED AIR DIST BS BSB F55555555
A37 ENGINE BLEED AIR DIST BS BVA F55555555
A37 ENGINE BLEED AIR SUPPLIED BSB EAAH 111111111
A37 ASPIRATOR TUBE CONNECTOR 23GAL BSW BS 2
A37 ANTI-ICE TUBE 23GAK BSX BS A
A37 FWD RETAINING RING 23GAF BSX BS 1
A37 BLEED AIR TUBE 23GAC BSZ BS 8

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00000000011111111122222222233333333344444444455555555566666666677777777778
1234567890123456789012345678901234567890123456789012345678901234567890
A37 POWER TAKEOFF BT BX AAAAAAAAAA
A37 SHAFT GEAR 23HDF BTJ BT 0
A37 HEAT SHIELD LUBE SEAL 23BDQ BTK BT 0
A37 HEAT SHIELD RADIAL SHAFT 23RUP BTL BT 0
A37 RADIAL DRIVE SHAFT 23BCN BTM BT 0
A37 FRONT BRNG OIL NOZZLE 23BDM BTN BT 0
A37 SUMP TUBE ASSY 23BDL BTP BT 0
A37 OIL TUBE ASSY 23BDK BTQ BT 0
A37 BALL BEARING RADIAL DRIVE 23BDJ BTR BT 0
A37 RADIAL DRIVE BRNG HOUSING 23BDH BTS BT 0
A37 RADIAL DRIVE ROLLER BRNG 23BDG BTT BT 0
A37 AXIAL BEARING SUPPORT 23BDE RTU BT 0
A37 BALL BEARING 23BDG BTV BT 0
A37 BEVEL SHAFTGEAR DRIVER 23BDC BTW BT 0
A37 HOUSING ASSY 23BDH BTX BT 0
A37 INSULATION BLANKET 23BDA BTY BT 0
A37 POWER TAKEOFF ASSY 23BDG BTZ BT 0
A37 INLET AIR CONTROLLED BV BC 11111111
A37 INLET AIR CONTROLLED BV BDJ FAAAAAAAAA
A37 ANTI-ICE AIR DISTRIBUTED BVA BV A AAAAAAAAAA
A37 ANTI-ICE AIR ACTIVATED BVAA BVA AAAAAAAAAA
A37 ANTI-ICE MANIFOLD 23BAU BVAA BVAA 2
A37 ANTI-ICE VALVE SOLENOID 23HAU BVAA BVAA 5
A37 ANTI-ICE VALVE 23HAT BVAA BVAA 5
A37 ANTI-ICE ACTIVATE BVAB BVAA AAAAAAAAAA
A37 CONNECTOR THERMOUPLE 23HAW BVAB BVAB 8
A37 ICE DETECTION PROBE 23HAV BVAB BVAB A
A37 VARIABLE VANES POSITIONED BVV BV AAAAAAAAAA
A37 IGV MOTION TRANSMITTED BVBA BVV AAAAAAAAAA
A37 IGV MOTION TRANSMITTED BVBA BVBC FAAAAAAAAA
A37 IGV MOTION TRANSMITTED BVBA BVBD FAAAAAAAAA
A37 ACTUATOR ROD END 2 EACH 23JAP BVBAW BVBA 3
A37 ACTUATOR LEVER 2 EACH 23JAF BVBAW BVBA 2
A37 SYNCHRONIZING CABLE 23JAJ BVBAW BVBA 2
A37 ACTUATOR BELLCRANK 2 EACH 23JAG BVBAZ BVBA 2
A37 IGV ACTUATION BVBB BVBA AAAAAAAAAA
A37 ACTUATOR FUEL TUBE 23JAL BVBB BVBB 2
A37 ACTUATOR FUEL HOSE 23JAK BVBB BVBB 5
A37 IGV ACTUATOR 2 EACH 23JAB BVBB BVBB 3
A37 BLEED AIR CONTROLLED BVBC BVV 11111111
A37 BLEED AIR VALVE ASSY 23JAM BVBC BVBC 7
A37 FEEDBACK CONTROL BVBD BVBB AAAAAAAAAA
A37 ROD END 23JAP BVBD BVBD 2
A37 FEED BACK CABLE 23JAH BVBD BVBD 5
A37 ENGINE COOLED BVBE BA 11111111
A37 STAGE 1 COOLING DEFLECTOR 23CAH BVBE BVBE 1
A37 ADJUSTABLE LINKS 2 EACH 23JAN BVBW BVV 0
A37 RING ASSY LUG DETACHABLE 23JAE BVBX BVV 0
A37 RING ASSY BUTTONS MIPLON 23JAD BVBY BVV 0
A37 ACTUATOR RING ASSY 23JAC BVBZ BVV 8

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 BEARING HOUSING 236AC BVQ BV 1
A37 INLET GUIDE VANES 15 EA. 23JAA BVR BV 1
A37 OUTER GUIDE VANE BUSHING 23BAP BVS BV 2
A37 INNER GUIDE VANE BUSHING 23BAN BVT BV 2
A37 SHROUD AND SEAL 23BAH BVU BV 0
A37 SUMP COVER 23BAG BVV BV 0
A37 PLUNGER DOME 23BAF BVW BV 1
A37 PARABOLIC DOME 23BAE BVX BV 0
A37 FRONT FRAME STRUT 23BAB BVY BV 0
A37 FRONT FRAME CASING 23BAA BVZ BV 3
A37 ACCESSORY GEARBOX DRIVEN BX BA SAAAAAAAAA
A37 ACCESSORY GEARBOX DRIVEN BX BXA FAAAAAAAAA
A37 ACCESSORY GEARBOX DRIVEN BX BXB AAAAAAAAAA
A37 ACCESSORY GEARBOX DRIVEN BX BXC AAAAAAAAAA
A37 ACCESSORY GEARBOX DRIVEN BX BXD FAAAAAAAAA
A37 ACCESSORY GEARBOX DRIVEN BX BXF FAAAAAAAAA
A37 DRIVE AXIS A ENABLED BXA BDG 11111111
A37 SHAFT GUIDE COVER 23ABJ BXAP BXA 0
A37 SHAFT SHIELD GUIDE 23ABH BXAQ BXA 0
A37 RETAINING RING 23ABG BXAR BXA 1
A37 ROLLER BEARING HOUSING 23ABF BXAS BXA A
A37 ROLLER BEARING 23ABE BXAT BXA A
A37 BEVEL SHAFTGEAR 23ABD BXAU BXA A
A37 BEARING RETAINER 23ABC BXAV BXA A
A37 BALL BEARING 23ABB BXAW BXA A
A37 BEARING HOUSING 23ABA BXAX BXA A
A37 AXIS A DRIVE GROUP 23ABO BXAY BXA A
A37 ACCESSORY GEARBOX ASSY 23AAC BXAZ BXA A
A37 DRIVE AXIS B ENABLED BXB UHAR AAAAAAAAAA
A37 AFT RUBBING SEAL 23ALL BXBH BXB 1
A37 BALL BEARING HOUSING 23ACK BXBH BXB A
A37 BALL BEARING RETAINER 23ACH BXBH BXB A
A37 BALL BEARING 23ACJ BXBQ BXB A
A37 BEVEL GEAR 23ACG BXBH BXB A
A37 SHAFT GEAR 23ACF BXBH BXB A
A37 ROLLER BEARING 23ACE BXBH BXB A
A37 RING SEAL MATING 23ACD BXBH BXB 1
A37 BALL BEARING HOUSING 23ACC BXBH BXB A
A37 FWD RUBBING SEAL 23ACB BXBH BXB 1
A37 HOUSING SEAL 23ACA BXBH BXB 1
A37 AXIS B DRIVE GROUP 23ACO BXBH BXB A
A37 ACCESSORY GEARBOX ASSY 23AAO BXBH BXB A
A37 DRIVE AXIS C ENABLED BXC UDG AAAAAAAAAA
A37 FWD COVER PAD 23ADM BXCL BXC 0
A37 FWD SEAL HOUSING 23ADL BXCM BXC 1
A37 FWD RUBBING SEAL 23ADK BXCN BXC 1
A37 FWD MATING RING 23ADJ BXCP BXC 1
A37 FWD BALL BEARING HOUSING 23ADH BXCQ BXC A
A37 FWD BALL BEARING 23ADG BXCR BXC A
A37 SHAFT GEAR 23ADF BXCS BXC A

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A37	AFT BALL BEARING	23ADE	BXCT	BXC	A	
A37	AFT MATING RING	23ADD	BXCU	BXC	1	
A37	AFT RUBBING SEAL	23ADC	BXCV	BXC	1	
A37	BALL BEARING HOUSING	23ADB	BXCW	BXC	A	
A37	AFT PAD COVER	23ADA	BXCX	BXC	0	
A37	AXIS C DRIVE GROUP	23ADO	BXCY	BXC	A	
A37	ACCESSORY GEARBOX ASSY	23AAO	BXCZ	BXC	A	
A37	DRIVE AXIS D ENABLED		BXD	BDF		AAAAAAAAA
A37	DRIVE AXIS D ENABLED		BXD	BXDA		FAAAAAAAAA
A37	ENGINE RPM MEASURED		BXDA	BXDB		AAAAAAAAA
A37	TACHOMETER GENERATOR	23HAH	BXDAZ	BXDA	A	
A37	ENGINE RPM INDICATED		BXDB	BEF		555555555
A37	TACHOMETER INDICATOR	23KDF	BXDBZ	BXDB	3	
A37	RUBBING SEAL	23AEF	BXDS	BXD	1	
A37	SEAL/BEARING HOUSING	23AEE	BXDT	BXD	A	
A37	AFT BALL BEARING	23AED	BXDU	BXD	A	
A37	SHAFT GEAR	23AEC	BXDV	BXD	A	
A37	FWD BALL BEARING	23AEB	BXDW	BXD	A	
A37	MATING RING	23AEA	BXDX	BXD	1	
A37	AXIS D DRIVE GROUP	23AEO	BXDY	BXD	A	
A37	ACCESSORY GEARBOX ASSY	23AAO	BXDZ	BXD	A	
A37	DRIVE AXIS F ENABLED		BXF	BLB		AAAAAAAAA
A37	SHAFT GEAR	23AGC	BXFR	BXF	A	
A37	BALL BEARING RETAINER	23AGG	BXFS	BXF	A	
A37	RETAINING RING	23AGF	BXFT	BXF	A	
A37	BALL BEARING	23AGE	BXFU	BXF	A	
A37	BALL BEARING HOUSING	23AGD	BXFW	BXF	A	
A37	ROLLER BEARING	23AGB	BXFW	BXF	A	
A37	ROLLER BEARING HOUSING	23AGA	BXFX	BXF	A	
A37	AXIS F DRIVE GROUP	23AGO	BXFY	BXF	A	
A37	ACCESSORY GEARBOX ASSY	23AAO	BXFZ	BXF	A	
A37	RIGHT OIL NOZZLE	23AAG	BXT	BX	2	
A37	LEFT OIL NOZZLE	23AAF	BXU	BX	2	
A37	FWD OIL SCAVENGE TUBE	23AAE	BXV	BX	5	
A37	REAR OIL SCAVENGE TUBE	23AAD	BXW	BX	5	
A37	CASE BAFFLE	23AAC	BXX	BX	0	
A37	GEARBOX CASE	23AAB	BXY	BX	3	
A37	GEARBOX COVER	23AAA	BXZ	BX	1	
A37	INLET SCREENS ACTUATED		BZ	BA		011000000
A37	PILOT MANUAL ACTUATED		BZA	BZ	K BZB	111111111
A37	CONTROL SWITCH	11341	BZAZ	BZA	8	
A37	AUTOMATIC ACTUATED		BZB	BZ	K BZA	111111111
A37	LANDING GEAR SQUAT SW.	11342	BZBZ	BZB	1	
A37	THROTTLE POSITION ACTUATE		BZC	BZ		111111111
A37	THROTTLE LIMIT SWITCH 2	11345	BZCZ	BZC	2	
A37	INLET SCREEN POS SENSED		BZX	BZA		111111111
A37	ANNUNCIATOR PANEL	4431A	BZXW	BZX	2	
A37	MASTER CAUTION LIGHT	4431B	BZXX	BZX	1	
A37	POSITION LIGHT	11344	BZXY	BZX	2	
A37	POSITION SWITCH	11343	BZXZ	BZX	5	

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 AIR INLET SCREENS 2EA 11327 BZZA BZ 1
A37 INLET SCREEN ACTUATOR 11331 BZZB BZ A
A37 INLET SCREEN CONT VALVE 11332 BZZC BZ 8
A37 COMM/NAV/IDENT C AAAAAAAAAA
T37COMMUNICATIONS-IFF C AAAAAAAAAA
A37 COMMUNICATIONS CC E 011111120
A37 AIR / GROUND COMM CCB 111111111
A37 UHF COMMUNICATIONS CCBA CCB CCBA 111111111
A37 VHF COMMUNICATION CCB K CCBA AAAAAAAAAA
A37 VHF XMIT & RECEIVE CCB CNBB AAAAAAAAAA
A37 UHF CONTROL / MODE SELECT CCB CCBA AAAAAAAAAA
A37 UHF CONTROL / MODE SELECT CCB CCBJ FAAAAAAAAA
A37 ARC 150 CONTROL 63614 CCB CU CCBC 5
A37 ARC 109 FREQ RELAY SWITCH 63525 CCB CV CCBC 2
A37 ARC 109 CONTROL 63512 CCB CW CCBC 5
A37 ARC 51 WATT METER 63318 CCB CX CCBC 0
A37 ARC 51 CONTROL 63312 CCB CY CCBC 5
A37 ARC 133 CONTROL 63112 CCB CZ CCBC 5
A37 UHF XMIT & RECEIVE CCB CCBA AAAAAAAAAA
A37 ARC 109 ADAPTER 63517 CCB DA CCB 0
A37 RF TRANSLATOR 63518 CCB DAV CCB 1
A37 ARC 109 RELAY 63524 CCB DAW CCB 2
A37 ARC 109 COAX CABLE 63523 CCB DAX CCB 2
A37 ARC 109 RACK 63522 CCB DAY CCB 0
A37 ARC 109 TERMINAL STRIP 63521 CCB DAZ CCB 1
A37 ARC 109 BLOWER 63516 CCB DB CCB 1
A37 ARC 109 RCVR / XMTR 63115 63515 CCB DC CCB 5
A37 ARC 150 RCVR-XMTR 63611 CCB DCA CCB 5
A37 ARC 109 MOUNT 63514 CCB DD CCB 0
A37 ARC 109 POWER SUPPLY 63513 CCB DE CCB 8
A37 ARC 150 POWER SUPPLY 63615 CCB DEA CCB 8
A37 ARC 109 ANTENNA 63511 CCB DF CCB 5
A37 ARC-51 RELAY 63414 CCB DG CCB 2
A37 ARC-51 COAX CABLE 63413 CCB DH CCB 2
A37 ARC-51 RACK 63412 CCB DJ CCB 0
A37 ARC-51 TERMINAL STRIP 63411 CCB DK CCB 1
A37 ARC-51 BLOWER 63317 CCB DL CCB 1
A37 ARC-51 RCVR / XMTR 63115 63315 CCB DM CCB 5
A37 ARC-51 MOUNT 63314 CCB DN CCB 0
A37 ARC-51 POWER SUPPLY 63313 CCB DP CCB 8
A37 ARC-51 ANTENNA 63311 CCB DQ CCB 5
A37 ARC 133 RELAY 63215 CCB DR CCB 2
A37 ARC 133 COAXIAL CABLE 63213 CCB DS CCB 2
A37 ARC 133 RACK 63212 CCB DT CCB 0
A37 ARC 133 TERMINAL STRIP 63211 CCB DU CCB 1
A37 ARC 133 ANTENNA SHIELD 63117 CCB DV CCB 1
A37 ARC 133 ANTENNA 63111 CCB DW CCB 5
A37 ARC 133 MOUNT 63114 CCB DX CCB 0
A37 POWER SUPPLY 63113 CCB DY CCB 8
A37 ARC 133 RCVR / XMTR 63315 63115 CCB DZ CCB 5

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00000000011111111122222222223333333333444444445555555555666666666677777777778
1234567890123456789012345678901234567890123456789012345678901234567890
A37 RECEIVE UHF CCBE CC8D 8888888888
A37 RECEIVE UHF CCBE CNHF AAAAAAAAAA
A37 XMIT UHF CCBF CC8D 222222222
A37 ARC 150 RCVR-XMTR 63611 CC8FS CC8F 5
A37 ARC 109 XCVR / XMTR 63515 CC8FT CC8F 5
A37 ARC 51 XCVR / XMTR 63315 CC8FU CC8F 5
A37 ARC 133 XCVR / XMTR 63115 CC8FW CC8F 5
A37 POWER SUPPLY ARC 109 63513 CC8FX CC8F 8
A37 ARC 150 POWER SUPPLY 63615 CC8FXA CC8F 8
A37 POWER SUPPLY ARC 51 63313 CC8FY CC8F 8
A37 POWER SUPPLY ARC 133 63113 CC8FZ CC8F 8
A37 UHF / DF RECEIVE CC8G CC8E FAAAAAAAAA
A37 UHF / DF RECEIVE CC8G CNHF 333333333
A37 MOUNT 71514 CC8GW CC8G 0
A37 ANTENNA HOUSING ARA-50 71513 CC8GX CC8G 0
A37 AMPLIFIER ARA-50 71512 CC8GY CC8G 8
A37 ANTENNA ARA-50 71511 CC8GZ CC8G 8
A37 UHF / DF INTERFACE SELECT CC8J CC8G AAAAAAAAAA
A37 ARC 150 CONTROL 63614 CC8JW CC8G 5
A37 ARC 109 CONTROL 63512 CC8JX CC8G 5
A37 ARC 51 CONTROL 63312 CC8JY CC8G 5
A37 ARC 133 CONTROL 63112 CC8JZ CC8G 5
A37 VHF HOMING & APPROACH CC8M CC8B FAAAAAAAAA
A37 VHF HOMING & APPROACH CC8M CNHF 333333333
A37 ANTENNA MOUNT 71415 CC8MW CC8M 0
A37 ARA-56 ANTENNA PH BOX 71414 CC8MX CC8M 5
A37 ARA-56 ANTENNA COUPLER 71413 CC8MY CC8M 8
A37 ARA-56 ANTENNA 71412 CC8MZ CC8M 5
A37 VHF XMIT / RECEIVE CC8N CC8B AAAAAAAAAA
A37 ANTENNA 62213 CC8NS CC8N 5
A37 MOUNT 62212 CC8NT CC8N 0
A37 WILCOX 807 RCVR / XMTR 62211 CC8NU CC8N 8
A37 FM 622 MOUNT ASSY 62116 CC8NV CC8N 0
A37 FM 622 RACK ASSY 62115 CC8NW CC8N 0
A37 FM 622 ANTENNA COUPLER 62114 CC8NX CC8N 2
A37 FM 622 ANTENNA 62113 CC8NY CC8N 5
A37 FM 622 RCVR / XMTR 62111 CC8NZ CC8N 8
A37 VHF CONTROL & MODE SELECT CC8P CC8B AAAAAAAAAA
A37 WILCOX CONTROL 71111 CC8PY CC8P 8
A37 FM-622 CONTROL PANEL 62112 CC8PZ CC8P 8
A37 INTERCOMMUNICATIONS CCC CC 000000000
A37 ELECTRICAL CONNECTOR 64114 CCCW CCC 2
A37 INTERCOMM CONTROL 64113 CCCX CCC 2
A37 MICROPHONE SWITCH 64112 CCCY CCB 1
A37 JUNCTION BOX 64111 CCCZ CCC 2
A37 KEYING CIRCUIT 64117 CCX CCB 8
A37 HEADSET CORD ASSEMBLY 64116 CCY CCB 5
A37 HEADSET SPEARS EQUIP< 2EA64115 CCZ CCB 5
A37 NAVIGATION CN C E 001222240
A37 D/F NAVIGATION USED CNA CN K CNB AAAAAAAAAA

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12345678901234567890123456789012345678901234567890123456789012345678901234567890							
A37	ELAPSED TIME OBSERVED		CNAB	CNA		11111111	
A37	CLOCK	51212	CNABZ	CNAB	2		
A37	AIRCRAFT HEADING OBSERVED		CNAC	CNA		AAAAAAAAAA	
A37	MAG HEADING		CNAD	CNAC	CNAE	11111111	
A37	ATTENUATER		CNADA	CNAD		11111111	
A37	COMPASS CORRECTION CARD	51214	CNADY	CNAD	0		
A37	STAND BY COMPASS	51211	CNADZ	CNADA	7		
A37	GYRO SLAVED MAG HEADING		CNAE	CNAC	CNAD	11111111	
A37	GYRO-MAG HEADING DERIVED		CNAF	CNAE		AAAAAAAAAA	
A37	S.3A DIRECTIONAL GYRO C.	51223	CNAFU	CNAF	8		
A37	COMPASS AMP	51224	CNAFV	CNAF	5		
A37	SLAVING CUT OUT SW	51225	CNAFW	CNAF	2		
A37	REMOTE MAGNETIC DETECTOR	51222	CNAFX	CNAF	8		
A37	B-7A AMP	51226	CNAFY	CNAF	2		
A37	SOLID STATE AMP	51227	CNAFZ	CNAF	2		
A37	SLAVED COMPASS INDICATED		CNAG	CNAE		11111111	
A37	V.8 INDICATOR	51221	CNAGZ	CNAG	7		
A37	BDHI HEADING BEZEL OBSRVD		CNAH	CNAE		11111111	
A37	BDHI BEZEL	51228	CNAHZ	CNAH	7		
A37	STEERING SOLUTIONS PROVIO		CNB	CN	CNA	11111111	
A37	BEARING / DISTANCE PROVIDE		CNBA	CNB		55555555	
A37	BDHI INDICATOR	51228	CNBAZ	CNBA	7		
A37	COURSE DEVIATION INDICATED		CNB8	CNB		55555555	
A37	AUTOMATIC DIRECTION FIND		CNB8C	CNBA	CNB8D	11111111	
A37	TACAN RANGE & BEARING		CNB8D	CNBA		11111111	
A37	TACAN COURSE TO INDICATED		CNB8E	CNB8B		55555555	
A37	INDICATOR DEV	71316 71315	CNB8Y	CNB8E	2		
A37	INDICATOR COURSE	7131D 7131C	CNB8Z	CNB8E	2		
A37	VHF HOMING COURSE INDICATO		CNB8F	CNB8B		33333333	
A37	INDICATOR	71411	CNB8FY	CNB8F	5		
A37	INDICATOR	7141A	CNB8FZ	CNB8F	5		
A37	TACAN RECEIVE & XMIT		CNB8G	CNB		S22222222	
A37	TACAN RECEIVE & XMIT		CNB8G	CNB8D		FAAAAAAAAAA	
A37	TACAN RECEIVE & XMIT		CNB8G	CNB8E		F555555555	
A37	AN/ARN.65 ANTENNA COUPLER	71318	CNB8GS	CNB8G	5		
A37	AN/ARN.65 RCV'R / XMTR	71317	CNB8GT	CNB8G	8		
A37	AN/ARN.65 PHASE DETECT	71314	CNB8GU	CNB8G	5		
A37	AN/ARN.65 CONTROL PANEL	71313	CNB8GV	CNB8G	5		
A37	AN/ARN.65 CHANGE.OVER SW	71312	CNB8GW	CNB8G	8		
A37	AN/ARN.65 ANTENNA	71311	CNB8GX	CNB8G	8		
A37	AN/ARN.65 MOUNT	71318	CNB8GY	CNB8G	0		
A37	AN/ARN.65 RELAY	7131A	CNB8GZ	CNB8G	5		
A37	VHF OMNI.RANGE INDICATED		CNBX	CNB8B		33333333	
A37	WILCOX 806A INDICATOR	7131C	CNBXV	CNBX	3		
A37	UHF DIRECTION FINDING		CNH	CNB8C	CNL	11111111	
A37	INDICATOR FREQ	63116	CNHFY	CNH	2		
A37	INDICATOR FREQ	63316	CNHFZ	CNH	2		
A37	LF DIRECTION FINDING		CNL	CNB8C		11111111	
A37	LF / DF MODE CONTROL		CNLFA	CNL		AAAAAAAAAA	
A37	LF / DF RECEIVE & PROCESS		CNLFB	CNL		55555555	

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A37	ARN 83 POWER SUPPLY	71618	CNLFBS	CNLFBS	8	
A37	ARN 83 MOUNT	71617	CNLFRT	CNLFBS	0	
A37	ARN 83 TRANSFER RELAY	71616	CNLFBU	CNRC	5	
A37	ARN 83 QUAD CORRECT	71615	CNLFHV	CNLFBS	2	
A37	ARN 83 SENSE ANTENNA	71614	CNLFBW	CNLFBS	4	
A37	ARN 83 LOOP ANTENNA	71613	CNLF BX	CNLFBS	2	
A37	ARN 83 RECEIVER	71612	CNLFHY	CNLFBS	8	
A37	ARN 83 CONTROL PANEL	71611	CNLF BZ	CNLFBS	2	
T37	NAVIGATION		CNT	C	E	001222210
T37	OR NAVIGATION UTILIZED		CNTA	CNT	K CNTB	AAAAAAAAA
T37	AIDED STEERING SOLUTIONS		CNTB	CNT	CNTA	111111111
T37	MAGNETIC INDICATOR	71118	CNTBS	CNTB		2
T37	COURSE INDICATOR	71117	CNTBT	CNTB		2
T37	ANTENNA COUPLER	71114	CNTBU	CNTB		2
T37	ANTENNA	71111	CNTBV	CNTB		5
T37	CONTROL	71112	CNTBW	CNTB		5
T37	INSTRUMENTATION UNIT	71113	CNTBX	CNTB		5
T37	MOUNT	71114	CNTBY	CNTB		0
T37	COLLIUS VHF PCVR	71115	CNTBZ	CNTB		8
T37	ELAPSED TIME OBSERVED		CNTC	CNTA		555555555
T37	CLOCK	51212	CNTCZ	CNTC		1
T37	AIRCRAFT HEADING OBSERVED		CNTD	CNTA		AAAAAAAAA
T37	STANDBY HEADING USED		CNTE	CNTD	CNTF	111111111
T37	ATTENUATOR		CNTEA	CNTE		111111111
T37	COMPASS CORR CARD	51214	CNTEY	CNTE		0
T37	STANDBY COMPASS 2EA	51211	CNTEZ	CNTEA		5
T37	PRIMARY HEADING USED		CNTF	CNTD	CNTE	111111111
T37	HEADING INDICATOR V-8	51221	CNTEZ	CNTF		8
T37	HEADING INFO DERIVED		CNTG	CNTF		AAAAAAAAA
T37	SOLID STATE AMP	51226	51227	CNTGU		5
T37	B.7A AMPLIFIER	51227	51226	CNTGV		5
T37	CUT. OUT SWITCH	51225	51225	CNTGW		5
T37	COMPASS AMP	51224	51224	CNTGX		8
T37	DIRECTIONAL GYRO	51223	51223	CNTGY		7
T37	REMOTE MAG DETECTOR	51222	51222	CNTGZ		8
A37	IDENTIFICATION		CR	C	E	000000000
T37	COMMUNICATIONS		CR	C		011111120
A37	RADAR BEACON XPONDER		CRA	CR		555555555
T37	AIR TO GROUND COMM		CRA	CR		111111111
A37	XPONDER CONTROL & ENABLE		CRAA	CRA		AAAAAAAAA
T37	ANTENNA	63111	63111	CRAA		5
A37	CIRCUIT BREAKER	72115	72115	CRAAY		5
A37	XPONDER SWITCH	72114	72114	CRAAZ		2
T37	CONTROL	63112	63112	CRAB		5
T37	POWER SUPPLY	63113	63113	CRAC		8
T37	MOUNT	63114	63114	CRAD		0
T37	FREQUENCY CARD	63116	63116	CRAF		0
T37	TERMINAL STRIP	63211	63211	CRAG		5
T37	EQUIPMENT RACK	63212	63212	CRAH		2
T37	COAXIAL CABLE	63213	63213	CRAJ		8

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T37RELAY	63215	CRAK	CRA	5
A37 COMPARATOR	65DAD	CRAS	CRA	0
A37 POWER SUPPLY TEST	65DAC	CRAT	CRA	0
A37 MODE GENERATOR	65DAB	CRAU	CRA	0
A37 MAIN FRAME ASSY	650AA	CRAV	CRA	0
A37 TRANSPONDER TEST SET	65DAO	CRAW	CRA	0
A37 ANTENNA	72113	CRAX	CRA	5
A37 MOUNT	72112	CRAY	CRA	0
A37 TRANSPONDER ASSY	72111	CRAZ	CRA	8
A37 IDENTIFICATION FRIEND / FOE		CRB	CR	AAAAAAAAA
A37 IFF XMIT / RECEIVE		CRBA	CRB	AAAAAAAAA
A37 SIGNAL PROCESSOR	65BCK	CRBAF	CRBA	5
A37 T.SEC COMPUTER KIT	65RCN	CRBAG	CRBA	0
A37 RECEIVER	65BCM	CRBAH	CRBA	5
A37 TRANSMITTER	65BCL	CRBAJ	CRBA	5
A37 MODE 4 PROCESSOR	65BCJ	CRBAK	CRBA	5
A37 ENCODE GATE	65BCH	CRBAL	CRBA	2
A37 POWER SUPPLY	65BCG	CRBAM	CRBA	5
A37 DECODER	65BCF	CRBAN	CRBA	1
A37 CLOCK ENCODER	65BCE	CRBAP	CRBA	5
A37 ENCODER CONTROL	65BCD	CRBAQ	CRBA	5
A37 VIDEO AMP DETECTOR	65BCC	CRBAR	CRBA	2
A37 APX.64 MOUNT	65AAE	CRBAS	CRBA	0
A37 APX.72 MOUNT	65BAE	CRBAT	CRBA	0
A37 APX 64 XPONDER	65CAO	CRBAU	CRBA	8
A37 APX.72 XPONDER	65DAO	CRBAV	CRBA	8
A37 APX.64 ANTENNA	65AAD	CRBAW	CRBA	5
A37 APX 72 ANTENNA	65BAD	CRBAX	CRBA	5
A37 APX.64 XMTR RCVR	65ABO	CRBAY	CRBA	8
A37 APX 64 RCVR-XMTR	65ACO	CRBAYA	CRBA	8
A37 APX.72 XMTR RCVR	65BBO	CRBAZ	CRBA	8
A37 APX 72 RCVR-XMTR	65BCO	CRBAZA	CRBA	8
A37 IFF CONTROL		CRBB	CRB	AAAAAAAAA
A37 APX.64 ANTENNA SW COAX	65AAB	CRBBU	CRBB	2
A37 APX.72 ANTENNA SW COAX	65BAB	CRBBV	CRBB	2
A37 APX.64 ANTENNA SELECT SW	65AAC	CRBBW	CRBB	5
A37 APX.72 ANTENNA SELECT SW	65BAC	CRBBX	CRBB	5
A37 APX.64 CONTROL	65AAA	CRBBY	CRBB	5
A37 APX.72 CONTROL	65BAA	CRBBZ	CRBB	5
A37 ALTITUDE REPORTING		CRBE	CRBA	555555555
A37 AAU 21 ALTITUDE ENCODER	51122	CRBEZ	CRBE	8
T37RLCEIVER TRANSMITTER	63115	CRDE	CRA	8
T37AIRCREW INFO EXCHANGE		CRG	CR	000000000
T37INTERPHONE FILTER	6411A	CRGA	CRG	2
T37INTERPHONE FILTER	6411A	CRGB	CRG	2
T37ELECTRICAL CONNECTOR	64114	CRGC	CRG	2
T37ELECTRICAL CONNECTOR	64114	CRGD	CRG	2
T37ELECTRICAL CONNECTOR	64114	CRGE	CRG	2
T37ELECTRICAL CONNECTOR	64114	CRGF	CRG	2
T37ELECTRICAL CONNECTOR	64114	CRGH	CRG	2

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T37ELECTRICAL CONNECTOR      64114   CRGJ   CRG      2
T37ELECTRICAL CONNECTOR      64114   CRGK   CRG      2
T37PERSONAL EQUIPMENT         64115   CRGL   CRG      2
T37PERSONAL EQUIPMENT         64115   CRGM   CRG      2
T37HEADSET CORD ASSEMBLY      64116   CRGN   CRA      1
T37HEADSET CORD ASSEMBLY      64116   CRGO   CRA      1
T37RELAY RE 94A               64117   CRGP   CRG      5
T37MODE SELECT                CRM     CRA      1
T37MODE SELECT                CRM     CRG      1
T37MICROPHONE SWITCH          64112   CRMA   CRM      1
T37MICROPHONE SWITCH          64112   CRMB   CRM      1
T37CONTROL C 824A             64118   CRMC   CRM      5
T37CONTROL C 824A             64118   CRMD   CRM      5
T37IFF-LOCATION-ALTITUDE       CT       C      1
T37MODE SELECT                CTM     CT      1
T37IFF CONTROL C6280 EMER      65BCA   CTME   CTM      8
T37IFF CONTROL C6280 NORMAL    65BCA   CTMN   CTM      1
T37MOUNT EMER                 65BAC   CTREB   CT      2
T37 TEST SLT 1843 APX EMER     65BD0   CTREC   CT      0
T37ANTENNA AT 7411A EMER      65BAF   CTRED   CT      5
T37 KSVR-XMTR EMERG           65BRO   CTTEA   CT      5
T37SWITCH ANT MAN SELCT EMER  65BAG   CTTEB   CT      8
37 INFORMATION & DISPLAY      D        D      1
37 FLIGHT STATUS              DAA      DA      1
37 ALTITUDE                    DAA      DA      1
37 ALTITUDE RATE CHANGE        DAA      DA      1
37 RATE OF CLIMB INDICATOR 51123 DAAZ     DAAB      5
37 PRESSURE ALTITUDE           DAA      DA      1
37 STANDBY ALTITUDE INDICATE   DAA      DA      1
37 ALTIMETER                   51122 DAAZ     DAA      8
A37 ALTITUDE DISPLAY 1 ENCODE DAAE     CRBF      1
T37 ALT DISPLAY ENCODE         DAAE     CT      1
37 ALTITUDE DISPLAY 1 ENCODE   DAAE     DAA      1
A37 ALTIMETER AAU/21           51124 DAAEZ     DAAE      8
37 ATTITUDE INDICATED          DAB      DA      1
37 STANDBY ATTITUDE INDICATED DAB      DA      1
A37 ATTITUDE IND 51132         51138 DABAY     DAB      5
37 ATTITUDE IND 51138         51132 DABAZ     DAB      5
37 PRIMARY ATTITUDE INDICATED DAB      DAB      1
T37 VERTICAL GYRO              51135 DABBU     DAB      2
37 2NTERLOCK RELAY            51136 DABRV     DAB      5
A37 GYRO FAST ERECT SWITCH     9951A DABBW     DAB      2
A37 CUT.OFF GYRO MC.1         51137 DABBX     DAB      2
A37 MD.1 GYRO SWITCH RATE<    51134 DABBY     DAB      8
A37 MM.3 ATTITUDE INDICATER    51133 DABBZ     DAB      5
37 TURN & SLIP INDICATED       DAB      DAB      1
37 TURN & SLIP INDICATOR      51131 DABCB     DAB      5
A37 STATIC PRESSURE SENSED     DAF      CRBE      1
37 STATIC SENSING             DAF      DAA      1
37 STATIC SENSING             DAF      DAB      1

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37  STATIC SENSING          DAF          DAA0          FAAAAAAAAA
37  STATIC SENSING          DAF          DAAE          FAAAAAAAAA
37  STATIC SENSING          DAF          DAG          FAAAAAAAAA
37  STATIC TUBING           51144     DAFX          DAF          5
37  STATIC DRAIN 2 EACH     51143     DAFY          DAF          0
37  STATIC PORT 2 EACH     51145     DAFZ          DAF          5
37  PITOT STATIC SENSING    DAG          DAGX          FAAAAAAAAA
37  PITOT STATIC SENSEING   DAG          DXB          AAAAAAAAAA
37  PITOT SENSING           DAG          DAG          AAAAAAAAAA
37  PITOT HEAD              51141     DAGAW         DAGA          8
37  PITOT TUBE              51142     DAGAX         DAGA          5
37  PITOT CNX TUBING        51144     DAGAY         DAGA          5
37  PITOT DRAIN PORT        51146     DAGAZ         DAGA          0
37  VGH RECORDED            DAGX          UB           11111111
37  MAGAZINE MAG TAPE       55AAC     DAGXX         DAGX          8
37  FLIGHT DATA RECORDER   55AAB     DAGXY         DAGX          8
37  TRANSMITTER ACCELEROMETER 55AAA     DAGXZ         DAGX          8
37  MAINTENANCE GUAGES/ IND DB           D           00000000
37  WARNING INFORMATION     DC           D           AAAAAAAAAA
37  FIRE WARNING            DCA          RA           AAAAAAAAAA
37  FIRE WARNING            DCA          DC           AAAAAAAAAA
37  SYSTEM INTEGRITY MAINT'ND DCAA         DCA          11111111
T37  FLASHER ASSY           49114     DCAAW         DCAA          0
T37  MOUNT ASSY             49117     DCAAX         DCAA          0
37  TEST SWITCH             49115     DCAAY         DCAA          0
37  CONTROL SWITCH          49118     DCAAZ         DCAA          5
37  FIRE DETECTED           DCA          DCA          AAAAAAAAAA
T37  OVER HEAT DETECTOR 2EA 49112     DCABY         DCAB          5
37  FIRE DETECT CABLE 4EA 49111     DCABZ         DCAB          5
T37  OVERHEAT LIGHTS 2EA    44315     DCAVX         DCA          8
37  R.FIRE DETECTION LIGHT   44314     DCAY          DCA          8
37  L.FIRE DETECTION LIGHT   44314     DCAZ          DCA          8
T37  INTAKE ICE WARNING      DCD          DC           A           AAAAAAAAAA
T37  ICE WARNINGINTERPRETER 44427     DCDX          DCD          7
T37  ICE WARNING LITE       44312     DCDY          DCD          8
T37  ICE DETECT PROBE        44426     DCDZ          DCD          8
37  ATTENUATION             DX           DA           11111111
37  AIRCRAFT G.LOAD INDICATE DXA          DX           00005000
37  ACCELEROMETER           51111     DXAZ          DXA          5
A37  AIRSPEED OBSERVED      DXB          CNA          55555555
T37  MACH AIRSPEED INDICATED DXB          CNTA         88888888
37  MACH & AIRSPEED INDICATED DXB          DX           0A10101A0
37  AIRSPEED IND 2EA        51121     DXBZ          DXB          1
37  ENVIRONMENTAL CONTROL SYS E           E           AAAAAAAAAA
37  AIR TEMP / PRESSURE     EA          E           01111120
37  AIRCONDITIONING--VENTILATION EAA         EA           00111100
37  DISTRIBUTION OF AIR     EAAA        FAA          AAAAAAAAAA
37  DISTRIBUTION OF CONDIT AIR EAAB        FAAA        11111111
37  AIR OUTLET              41113     EAAB         1
37  AIR VALVE               41125     EAAB         1

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
37DISTRIBUTION VALVE 41141 EAABC EAAB 1
37PILOTT TUBE 41144 EAABD EAAB 0
37DISTRIBUTION OF RAM AIR 41124 EAAC EAAC K EAAB AAAAAAAAAA
37AIR SCOOP UPPER< 41124 EAACA EAAC 1
37RAM AIR VALVE 41123 EAACB EAAC A
37AIR OUTLET 41126 EAACC EAAC 1
37MIXING BLEED AIR 41138 EAAD EAAB AAAAAAAAAA
T37CONTROL WIRE MIXING VALVE 41138 EAADA EAAD 1
37MIXING MUFF 41142 EAADB EAAD A
37WATER SEPARATOR 41122 EAADC EAAD 1
T37WATER SEPARATOR SOCK 41127 EAADD EAAD 1
37MODULATING VALVE 41131 EAAD E 5
37TEMPERATURE SELECTOR VALVE 41136 EAADF EAAD 5
37SELECTOR SWITCH 41137 EAAEA EAAA A
37REFRIGERATED AIR 41124 EAAF EAAD AAAAAAAAAA
37COOLING TURBINE 41124 EAFA EAAD 8
37HEAT EXCHANGER 41121 EAFB EAAD 5
T37DUCT RAM AIR <LOWER< 41128 EAF C EAAD 1
37TEMPERATUR CONTROL-AUTOMATIC 41134 EAAG EAAD 111111111
37TEMPERATURE CONTROLLER 41134 EAAG A
37THERMISTOR 41135 EAAGB EAAD A
37 HOT AIR CONTROL EAAD AAAAAAAAAA
37HOT AIR CONTROL EAAD FAAAAAAAAA
37 HOT AIR CONTROL EAAD AAAAAAAAAA
37AIRBLEED ASSEMBLY 41111 EAAD EAAD A
37CHECK VALVE-LEFT ENGINE 41114 EAAD EAAD 1
37SHUTOFF VALVE 41115 EAAD EAAD 5
37AIR BLEED VALVE 41116 EAAD EAAD 8
37AIR BLEED HOSE 41118 EAAD EAAD 5
37PLENUM CHAMBER 41132 EAAD EAAD 2
37SELECTOR SWITCH AUTOMATIC 4113A EAAD EAAD 5
37PEFOG EAB Y 000000010
37DEFOG DISTRIBUTION EAB AAAAAAAAAA
T37TUBE DEFROST 41145 EABA EABA 2
37PEFOG CONTROL EAB AAAAAAAAAA
T37PILOTER 41138 EABBA EAB 1
37DEFROSTING VALVE 41117 EABBB EAB 5
37DEFOG SELECT EAB AAAAAAAAAA
37SELECTOR SWITCH MANUAL 41133 EABCA EAB 5
37OXYGEN EAC 002444000
37DISTRIBUTION OF OXYGEN-INST EACA EAC 222222222
A37 DISTRIBUTION OF OXYGEN EACA H AAAAAAAAAA
37HOSE QUICK DISCONN TO MASK 47217 EACAA EACA 8
A37 OXYGEN PLUMBING 47213 EACAZ EACA 2
37DISTRIBUTION OF OXYGEN-PILOT EACB 222222222
37HOSE QUICK DISCONN TO MASK 47217 EACBA EACB 8
A37 OXYGEN PLUMBING 47213 EACBZ EACB 2
37REGULATION OF OXY-INST EACC EACC EACC 444444444
37REGULATOR 47211 EACCA EACC 8
37HOSE,QUICK DISCONN TO REG 47216 EACCB EACC 5

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37REGULATION OF OXYGEN-PILOT		EACD	EACB	CACH	11111111
37REGULATOR	47211	EACDA	EACD		8
37HOSE QUICK DISCONN TO REG	47216	EACDB	EACD		8
37SOURCE OF OXYGEN		EACE	EAC		S222222222
37		EACE	FACC		FAAAAAAAAAAA
37		EACE	EACD		FAAAAAAAAAAA
37CYLINDER BOTTLE	47111	EACEA	EACE		A
37FILLER VALVE	47112	EACEB	EACE		1
T37BRACKET-FILLER VALVE	47113	EACEC	EACE		0
37DISCONNECT	47114	EACED	EACE		1
37SUPPLY TO REGULATOR HOSE	47116	EACEE	EACE		R
A37 CHECK VALVE	47212	EACEZ	EACE		1
37EMERGENCY OXYGEN SOURCE-INST		EACG	EACA	K EACC	AAAAAAAAAA
37BAILOUT BOTTLE	99ZZD	EACGA	EACG		8
37EMERGENCY OXYGEN SOURCE-PILT		EACH	EACB	K EACD	AAAAAAAAAA
37BAILOUT BOTTLE	99ZZE	EACHA	FACH		8
37INTERNAL LIGHTS		EAD	EB		011111110
37PRIMARY INSTR. LIGHTS		EADA	EAD		11111111
37INST LIGHT- L OIL PRESS.	44211	EADAA	EADA		1
37INST LIGHT-L LOADMETER	44211	EADAAA	EADA		1
37INST LIGHT- ACCELEROMETER	44211	EADAB	EADA		2
37INST LIGHT- R OIL PRESS.	44211	EADAC	EADA		1
37INST LIGHT- L FUEL FLOW	44211	EADAD	EADA		1
37INST LIGHT- R FUEL FLOW	44211	EADADA	EADA		1
37INST LIGHT- R EGT I1	44211	EADAEA	EADA		1
37INST LIGHT- R EGT I2	44211	EADAEB	EADA		1
37INST LIGHT- R TACH I1	44211	EADAEC	EADA		1
37INST LIGHT- R TACH I2	44211	EADAED	EADA		1
37INST LIGHT- HYDRAUL PRESS.	44211	EADAF	EADA		1
37INST LIGHT- FUEL QNTY	44211	EADAGA	EADA		G
37INST LIGHT- FUEL QNTY	44211	EADAGB	EADA		0
37INST LIGHT- FUEL QNTY	44211	EADAGC	EADA		0
37INST LIGHT- OXYGEN - PILOT	44211	EADAH	EADA		1
37INST LIGHT- OXYGEN - INSTR.	44211	EADAHB	EADA		1
37INST LIGHT- FLAP POSITION	44211	EADAJ	EADA		0
37INST LIGHT- PANEL		EADAK	EADA		011111110
37INST.LIGHT - PANEL I1	44211	EADAKA	EADAK		1
37INST.LIGHT - PANEL I1	44211	EADAKB	EADAK		1
37INST.LIGHT - PANEL I1	44211	EADAKC	EADAK		1
37INST.LIGHT - PANEL I1	44211	EADAKD	EADAK		1
37INST.LIGHT - PANEL I1	44211	EADAKE	EADAK		1
37INST.LIGHT - PANEL I1	44211	EADAKF	EADAK		1
37INST.LIGHT - PANEL I2	44211	EADALB	EADAK		1
37INST.LIGHT - PANEL I2	44211	EADALC	EADAK		1
37INST.LIGHT - PANEL I2	44211	EADALU	EADAK		1
37INST.LIGHT - PANEL I2	44211	EADALE	EADAK		1
37INST.LIGHT - PANEL I2	44211	EADALF	EADAK		1
37INST.LIGHT - PANEL I2	44211	EADALG	EADAK		1
37INST.LIGHT - PANEL I2	44211	EADALH	EADAK		1

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
37INST.LIGHT - PANEL 12      44211  EADALI      EADAK      1
37INST.LIGHT - PANEL 12      44211  EADALJ      EADAK      1
37INST.LIGHT - PANEL 12      44211  EADALK      EADAK      1
37INST LIGHT L EGT 11        44211  EAUAMA      EADA       1
37INST LIGHT- L EGT 12       44211  EADAMB      FADA       1
37INST LIGHT- L TACH 11      44211  EADAMC      FAUA       1
37INST LIGHT- L TACH 12      44211  EADAMD      EADA       1
T37 CANOPY EMERGENCY SWITCH  11146  EADAZZW     EADX       0
37PRIMARY FLIGHT INST. LIGHTS EADB      EAD      222222222
37LIGHT - TURN & SLIP -PILOT 44211  EADRA      LAUB       1
37LIGHT - TURN & SLIP -INST. 44211  EADBB      EADB       1
37LIGHT - AIRSPEED - PILOT   44211  EADBC      EADB       2
37LIGHT - AIRSPEED - INST.   44211  EADBD      EADB       2
37LIGHT - ALTIMETER - PILOT   44211  EADBE      EADB       2
37LIGHT - ALTIMETER - INST.   44211  EADBF      EADB       2
37LIGHT - MM-3 ATTIT.IND.     44211  EADBG      EADB       5
37LIGHT - CLIMB RATE          44211  EADBH      EADB       3
37LIGHT - J-2 COMPASS         44211  EADBJA      EADB       0
37LIGHT - COURSE INDICAT      44211  EADBJB      EADB       0
37LIGHT - RADIO MAGNET COMP   44211  EADBJC      EADB       0
37LIGHT - STDBY COMPASS       44211  EADBJD      EADB       0
37LIGHT - CLOCK               44211  EADBK      LAUB       0
37SECONDARY INSTRUMENT LITES EADC      EAD      111111111
37SECONDARY INSTRUMENT LITE 1 44212  EADCA      EADC       1
37SECONDARY INSTRUMENT LITE 2 44212  EADCB      EADC       1
37SECONDARY INSTRUMENT LITE 3 44212  EAUCC      EADC       1
37SECONDARY INSTRUMENT LITE 4 44212  EAUCD      EADC       1
37SECONDARY INSTRUMENT LITE 5 44212  EAUCE      EADC       1
37RADIO LITES                 EADD      EAU      001111110
37LIGHT-RADIO                 44211  EADDA      EADD       5
37COCKPIT LITES               EADF      EAU      111111111
37SPOT LITE 1                 44213  EADFA      EADF       1
37SPOT LITE 2                 44213  EADFB      EADF       1
37COCKPIT LITE 1              44214  EADFC      EADF       1
37COCKPIT LITE 2              44214  EADFD      EADF       1
37CONTROL PRIMARY FLIGHT LITES EADG      EADG      AAAAAA
37RHEOSTAT                    44413  EADGA      EADG       A
37CONTROL PRIMARY INST LITES EADH      EADA      AAAAAA
37RHEOSTAT                    44413  EADHA      EADH       A
37CONTROL SECONDARY INST LITES EADJ      EADC      AAAAAA
37RHEOSTAT                    44413  EADJA      EADJ       A
37CONTROL RADIO LITES         EADK      EADD      AAAAAA
37RHEOSTAT                    44413  EADKA      EADK       A
37CONTROL COCKPIT LITES       EADM      EADF      AAAAAA
37RHEOSTAT                    44413  EADMA      EADM       A
37 CANOPY INTEGRITY MAINT NED EADX      DC      FAAAAA
37 CANOPY INTEGRITY MAINT NED EADX      EAOZ      011111110
37 CANOPY MOTOR               11142  EADXA      EADX       0
37 CANOPY LIMIT SWITCH        11141  EADXB      EADX       2
37 CANOPY LOCK                11137  EADXC      EADX       2

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FLIGHT SAFETY PREDICTION TECHNIQUE

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37	CANOPY DE-CLUTCH HANDLE	11136	EADXD	EADX	0
37	CANOPY HANDLE	11135	EADXE	EADX	0
37	CANOPY FLOOR SUPPORT	11134	EADXF	EADX	0
37	CANOPY CONNECTER	11133	EADYG	EADX	0
37	CANOPY DOWNLOCK ROLLER	11131	EADXH	EADX	0
37	CANOPY HOOK	11128	EADXJ	EADX	1
37	CANOPY LATCH ASSY	11127	EADXL	EADX	2
37	CANOPY LINKAGE	11126	EADXM	EADX	0
A37	CANOPY HINGE ARM	11125	EADXM	EADX	0
A37	CANOPY ACTUATOR	11124	EADYN	EADX	0
A37	CANOPY RETAINER	11123	EADXP	EADX	2
A37	CANOPY FRAME	11122	EADXQ	EADX	1
A37	CANOPY PANEL	11120	EADXR	EADX	1
A37	CANOPY SEAL	1112A	EADXS	EADX	2
A37	CANOPY ASSY	11121	EADXT	EADX	0
A37	WINDSHIELD ORLON EDGE	11115	EADYU	EADX	0
A37	WINDSHIELD MAG ROD	11114	EADYV	EADX	0
A37	WINDSHIELD RETAINER	11113	EADYW	EADX	2
A37	WINDSHIELD LH PANEL	11110	EADXX	EADX	1
A37	WINDSHIELD RH PANEL	1111A	EADXY	EADX	1
T37	WINDSHIELD ASSY	11111	EADYZ	EADX	2
37	CANOPY INTEGRITY ATTENUATE		EADZ	EA	011111110
37	TEST SW	44414	EADZY	EAD	0
37	BRIGHT/DIM SW	44412	EADZZ	EAD	1
T37	EMERGENCY SWITCH	11146	EADZZU	EADZ	0
37	CANOPY INTERNAL SWITCH	11145	EADZZX	EADX	0
37	CANOPY EXTERNAL SWITCH	11144	EADZZY	EADX	0
37	CANOPY NOT-LOCKED SWITCH	11143	EADZZZ	DC	8
37	INST.LIGHT - PANEL 12	44211	EAKALL	EADAK	1
37	INST.LIGHT - PANEL 12	44211	EAKALM	EADAK	1
37	INST.LIGHT - PANEL 12	44211	EAKALN	EADAK	1
37	INST.LIGHT - PANEL 12	44211	EAKALP	EADAK	1
37	LIGHTING		EB	E	0 111111121
37	ATTENUATION		EBA	EB	111111111
37	EXTERNAL LIGHTING		EBB	EBA	011111110
37	POSITION LITES		EBBA	EBB	000000000
37	LENS LOWER POSITION LITE	44118	EBBA	EBBH	0
37	NAVIGATION LITES		EBBB	EBB	000000000
A37	NAV LITE REFLECTOR	44118	EBBBZZ	EBBB	0
T37	PASSING LIGHT		EBBC	EBB	000000000
T37	PASSING LITE ASSEMBLY	44117	EBBCA	EBBC	A 0000000A0
37	LANDING LITE		EBBD	EBB	
37	LANDING LITE LT WING	44113	EBBDA	EBBD	5
37	LANDING LITE RT WING	44113	EBBDB	EBBD	5
37	LANDING LIGHT REVERSE MOTOR	44425	EBBDC	EBBD	0
37	TAXI LITE		EBBE	EBB	000000000
37	TAXI LITE NOSE	44114	EBBEA	EBBE	A
37	ANTICOLLISION BEACONS		EBBF	EBB	000000000
37	ANTICOLLISION BEACON UPPER	44116	EBBFA	EBBF	5
37	ANTICOLLISION BEACON LOWER	44116	EBBF8	EBBF	5

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1234567890123456789012345678901234567890123456789012345678901234567890
37UPPER POSITION LITE EBBG E8BA 055555550
37LENS UPPER POSITION LITE 44118 EBBGA EBBG 0
37UPPER POSITION LITE ASSY 44112 EBBGB EBBG A
37LOWER POSITION LITE EBBH ERBA 055555550
37LENS NAV LIGHT 4411A EBBHA EBBM 0
37LOWER POSITION LITE ASSY 44112 EBBHB EBBB A
37NAVIGATION LITE RT WING EBBJ EBBB 011111110
37LENS NAV LITE RT WING 4411A EBBJA EBBJ 0
37NAV LITE ASSY RT WING 44111 EBBJB EBBJ A
37NAVIGATION LITE LT WING EBBK EBBB 011111110
37LENS NAV LITE LT WING 4411A EBBKA EBBK 0
37NAV LITE ASSY LT WING 44111 EBBKB EBBK A
37NAV LITE TAILCONE WHITE EBBL EBBB 011111110
37LENS NAV LITE TAILCONE WHITE 4411A EBBLA EBBL 0
T37NAV LITE ASSY TAILCONE WHITE 44111 EBBLB EBBB A
37NAV LITE TAILCONE AMBER EBBM EBBB 011111110
37NAVIGATION LIGHT ASSY. 44111 EBBMB EBBM A
T37GEAR POWR INDICATOR EBBN EBBB AAAAAA
T37FLASHER UNIT 44422 EBBNA EBBN A
37LANDING LITE CONTROL EBBT EBBB AAAAAA
37 TOGGLE SWITCH 44411 EBBTA EBBT A
37 CONTROL BOX 44424 EBBTX EBBT 8
37 RESISTOR 44423 EBBTY EBBT 1
37 RELAY 44421 EBBTZ EBBT 5
37FLASHER UNIT 44422 EBBU EBBB 1
37TOGGLE SWITCH 44411 EBBVA EBBB 8
37TOGGLE SWITCH 44411 EBBXA EBBB A
37 WIND SHIELD CLEAR EC EA G C10000040
37 RAIN-CLEAR FLUID DISPENSED ECA EC AAAAAA
37 RAIN CLEAR FLUID SUPPLIED ECB ECA AAAAAA
37 RAIN CLEAR SIGHT RESERVOIR 49212 ECBU DB 0
37 RAIN CLEAR FLUID PLUMBING 49216 ECBV ECB 2
37 RAIN CLEAR FLUID VALVE 2EA 49215 ECBW ECB 5
37 RAIN CLEAR FLUID NOZZLE 2EA 49214 ECRX ECB 5
37 RAIN CLEAR FLUID MANIFOLD 49213 ECBY ECB 5
37 RAIN CLEAR FLUID TANK 49211 ECBZ ECB 8
37 WIND SHIELD CLEAR CONTROL ECC ECA AAAAAA
37 WIND SHIELD CLEAR TIME RELAY 49222 ECCY ECC 5
37 WIND SHIELD CLEAR SWITCH 49221 ECCZ ECC 8
37 FLIGHT CONTROL F F AAAAAA
37 LIFT AUGMENTATION FA F 010000030
37 FLAPS POSITIONED FAA FA 020000030
37 FLAPS POSITIONED FAAB FAAAAA
37 SYNCHRONIZING VALVE 14423 FAAX FAA 5
37 FLAP BLOW-UP VALVE 9914A FAAY FAA 2
37 FLAP SYNCH CABLES 14416 FAAZ FAA 5
A37 AIRCRAFT GROSS WT CONTROL FAB FA K BA 000000030
37 LEFT FLAP EXTENDED FAC FAA AAAAAA
37 LEFT FLAP LINKAGE 14418 FAC FAC 5

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37	LEFT FLAP RESTRICTOR	14422	FACS	FAC	2	
37	LEFT FLAP ACTUATOR	14421	FACT	FAC	5	
37	LEFT FLAP HINGE	14414	FACU	FAC	2	
37	LEFT FLAP SKIN	14413	FACV	FAC	0	
37	LEFT FLAP FRAME	14412	FACW	FAC	0	
37	LEFT FLAP ASSEMBLY	14411	FACX	FAC	5	
37	LEFT FLAP CHAFING STRIP	14410	FACY	FAC	0	
37	LEFT FLAP BEARINGS	14418	FACZ	FAC	1	
37	RIGHT FLAP EXTENDED		FAD	FAA		AAAAAAAAA
37	RIGHT FLAP LINKAGE	14418	FADR	FAD	5	
37	RIGHT FLAP RESTRICTOR	14422	FAUS	FAD	2	
37	RIGHT FLAP ACTUATOR	14421	FADT	FAD	5	
37	RIGHT FLAP HINGE	14414	FADU	FAD	2	
37	RIGHT FLAP SKIN	14413	FADV	FAD	0	
37	RIGHT FLAP FRAME	14412	FADW	FAD	0	
37	RIGHT FLAP ASSEMBLY	14411	FADX	FAD	5	
37	RIGHT FLAP CHAFING STRIP	14410	FADY	FAD	0	
37	RIGHT FLAP BEARINGS	14418	FADZ	FAD	1	
37	FLAPS ACTUATED		FAE	FAA		AAAAAAAAA
37	FLAPS ACTUATED		FAE	FAC		AAAAAAAAA
37	FLAPS ACTUATED		FAE	FAD		AAAAAAAAA
37	FLAP CONTROL CABLES	14416	FAEY	FAE	5	
37	FLAP SYNCH VALVE	14423	FAEZ	FAE	8	
37	HYDRAULIC DISTRIBUTED		FAF	FAA		AAAAAAAAA
37	HYDRAULIC DISTRIBUTED		FAF	FAE		AAAAAAAAA
37	HYDRAULIC DISTRIBUTED		FAF	FAL		AAAAAAAAA
37	FLAPS CONTROLLED		FAG	FAE		AAAAAAAAA
37	LEFT FLAP CONTROL		FAH	FAG		11111111
37	LEFT FLAP CONTROL HANDLE	99148	FAHZ	FAH	2	
37	RIGHT FLAP CONTROL		FAJ	FAG		11111111
37	RIGHT FLAP CONTROL HANDLE	99148	FAJZ	FAJ	2	
37	PILOT ACTION		FAK	FAG		AAAAAAAAA
37	STALL WARNING BUFFET		FAKA	FAK		22222222
37	FLAP POSITION INDICATED		FAKB	FAK		00000000
37	FLAP POSITION XMTR	51422	FAKBY	FAKB	5	
37	FLAP POSITION INDICATOR	51421	FAKBZ	FAKB	2	
37	SPOILERS ACTUATED		FAL	FALA		AAAAAAAAA
37	SPOILERS DEPLOYED		FALA	FAKA		AAAAAAAAA
37	SPOILER HINGE	14614	FALAW	FALA	5	
37	SPOILER SKIN	14613	FALAX	FALA	0	
37	SPOILER FRAME	14612	FALAY	FALA	0	
37	SPOILER ASSEMBLY	14611	FALAZ	FALA	5	
37	SPOILER ACTUATOR	14621	FALY	FAL	5	
37	SPOILER LINKAGE	14615	FALZ	FAL	5	
37	SPOILER DEPLOYMENT INITIAT		FAS	FAL		AAAAAAAAA
37	LIFT DATA SENSED		FASA	FAS		AAAAAAAAA
37	LIFT TRANSDUCER	14631	FASAZ	FASA	5	
37	FLAP POSITION SENSED		FASB	FAKB		AAAAAAAAA
37	FLAP POSITIONED SENSED		FASB	FAS		AAAAAAAAA
37	DETENT	14417	FASBW	FASB	1	

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37	FLAP POS.CABLE HOUSING	14410	FASBX	FASB	0	
37	FLAP POSITION CABLE	14415	FASBY	FASB	5	
37	FLAP POSITION SENSE AKM	1441A	FASBZ	FASB	5	
37	CONTROL SWITCH	14633	FASW	FAS	5	
37	LIFT COMPUTER	14632	FASX	FAS	8	
37	SPOILER RESTRICTOR	14623	FASY	FAS	2	
37	SPOILER CONTROL VALVE	14622	FASZ	FAS	8	
37	FLIGHT SPEED CONTROLLED		FB	FX		000010110
37	THRUST ATTENUATORS EXTENDED		FBA	FB		000000010
37	THRUST ATTENUATOR EXTEND		FBA	FBA		AAAAAAAAA
37	THRUST ATTENUATOR EXTENDED		FBA	FBA		333333333
37	ATTEN. LINKAGE	14517	FBAV	FBA	5	
37	ATTEN. LINK TUBE	14516	FBAW	FBA	0	
37	ATTEN. RESTRICTOR	14526	FBAAX	FBA	0	
37	ATTEN. BELLCRANK 2 EA	14515	FBAAY	FBA	2	
37	ATTEN. ACTUATOR	14527	FBAZ	FBA	5	
37	ATTENUATOR SEL VAL POSITN		FBA	FBA		AAAAAAAAA
37	THRUSTLE LIMIT SWITCH	14531	FBA	FBA	5	
37	ATTEN. CONTROL VALVE	14525	FBAZ	FBA	8	
37	HINGE 2EA	14518	FBA	FBA	5	
37	ASSEMBLY 2EA	14511	FBA	FBA	5	
A37	ATTENUATOR PADDLE 2EA	1451A	FBA	FBA	0	
T37	DEFLECTOR	1451C	FBA	FBA	0	
37	SPEED BRAKES EXTENDED		FBB	FB		555555555
37	SPEED BRAKE FAIRING	1451B	FBBW	FBB	1	
37	SPEED BRAKE DOOR	1451A	FBBX	FBB	0	
37	SPEED BRAKE HINGE	14514	FBBY	FBB	5	
37	SPEED BRAKE ASSY	14512	FBBZ	FBB	5	
37	SPEED BRAKES ACTUATED		FBC	FBB		AAAAAAAAA
37	SPEED BRAKE LINKAGE 2EA	14513	FBCY	FBC	2	
37	SPEED BRAKE ACTUATOR 2E	14523	FBCZ	FBC	2	
37	SPEED BRAKE/THRUST CONTROL		FBD	FB		511111111
37	SPEED BRAKE/THRUST CONTROL		FBD	FBA		AAAAAAAAA
37	SPEED BRAKE/THRUST CONTROL		FBD	FBC		AAAAAAAAA
37	HYDRAULIC PRESSURE DIST		FBD	FB		AAAAAAAAA
37	HYDRAULIC PRESSURE DIST		FBD	FBA		AAAAAAAAA
37	HYDRAULIC PRESSURE DIST		FBD	FBE		AAAAAAAAA
37	MANUAL SHUT-OFF VALVE	14524	FBDZ	FBD	0	
37	PRIORITY VALVE	14528	FBDZ	FBD	2	
37	SPEED BRAKE SEL VALV POS.		FBE	FBC		AAAAAAAAA
37	SPEED BRAKE RESTRICTOR	14522	FBEY	FBE	0	
37	SPEED BRAKE CONTROL VALVE	14521	FBEZ	FBE	8	
37	SPEED BRAKE ENABLE		FBF	FBD		AAAAAAAAA
37	SPEED BRAKE CONT SW. 2EA	14533	FBFY	FBF	1	
37	SPEED BRAKE CIRCUIT BREAKR	14532	FBFZ	FBF	5	
37	THRUST ATTENUATOR RETRACT		FBP	BA		010000000
37	YAW CONTROL		FC	F		010010030
37	RUDDER POSITION		FCA	FC		AAAAAAAAA
37	RUDDER HINGE	14327	FCAV	FCA	7	
37	RUDDER BELLCRANKS 2 EACH	14321	FCAW	FCA	5	

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37	RUDDER SKIN	14313	FCA	FCA	0	
37	RUDDER FRAME	14312	FCA	FCA	0	
37	RUDDER ASSEMBLY	14311	FCA	FCA	8	
37	RUDDER CONTROL MOTION XMIT		FCA	FCA		AAAAAAAAA
37	RUDDER CONTROL CABLE	14314	FCA	FCA	5	
37	RUDDER CABLE PULLEYS 14EA	14315	FCA	FCA	2	
A37	YAW DAMPING		FCA	FCA		000000000
A37	YAW INPUT SIGNAL		FCA	FCA		AAAAAAAAA
A37	YAW RATE GYRO	14722	FCA	FCA	8	
A37	PNEUMATIC PRESSURE		FCA	FCA		555555555
A37	AIR FILTER	14713	FCA	FCA	0	
A37	AIR PRESS REGULATOR	14712	FCA	FCA	2	
A37	SOL SHUTOFF VALVE	14725	FCA	FCA	5	
A37	AIR VALVE	14714	FCA	FCA	5	
A37	YAW DAMPING CONTROL		FCA	FCA		AAAAAAAAA
A37	OVER RIDE SWITCH	14724	FCA	FCA	5	
A37	YAW DAMP COMPUTER	14721	FCA	FCA	5	
A37	YAW DAMPING SELECTED		FCA	FCA		AAAAAAAAA
A37	STICK GRIP DISCNX SWITCH	1411A	FCA	FCA	2	
A37	YAW DAMPING ENGAGE SW	14723	FCA	FCA	5	
A37	CONTROL CABLE	14715	FCA	FCA	5	
A37	DAMPING SERVO ACTUATOR	14711	FCA	FCA	5	
37	RUDDER PEDAL DISPLACEMENT		FCA	FCA		AAAAAAAAA
37	LEFT RUDDER CONTROL		FCA	FCA		111111111
37	LEFT RUDDER CONTROL		FCA	FCA		AAAAAAAAA
37	RUDDER PEDAL SUPPORT	14328	FCA	FCA	2	
37	RUDDER PEDAL HINGE PIN	14327	FCA	FCA	5	
37	RUDDER PEDAL BUNGEE	14326	FCA	FCA	0	
37	RUDDER PEDAL BALANCE WT	14324	FCA	FCA	0	
37	LEFT RUDDER PEDAL ADJUST	14318	FCA	FCA	0	
37	LEFT RUDDER PEDAL 2EA	14317	FCA	FCA	5	
37	LEFT RUDDER TORQUE TUBE	14316	FCA	FCA	2	
37	RIGHT RUDDER CONTROL		FCA	FCA		111111111
37	RIGHT RUDDER PEDAL SUPPORT	14328	FCA	FCA	2	
37	RIGHT RUDDER PEDAL HINGE	14327	FCA	FCA	5	
37	RIGHT RUDDER PEDAL BUNGEE	14326	FCA	FCA	0	
37	RIGHT RUDDER PEDAL BAL WT	14324	FCA	FCA	0	
37	RIGHT RUDDER PEDAL ADJUST	14318	FCA	FCA	0	
37	RIGHT RUDDER PEDAL 2EA	14317	FCA	FCA	5	
37	RIGHT RUDDER TORQUE TUBE	14316	FCA	FCA	2	
37	RUDDER TRIM POSITIONED		FCA	FCA		000000000
37	RUDDER TRIM ACTUATED		FCA	FCA		AAAAAAAAA
37	RUDDER TCIRCUIT BREAKER	14332	FCA	FCA	5	
37	RUDDER TACTUATOR MOTOR	14333	FCA	FCA	7	
37	RUDDER TRIM INITIATED		FCA	FCA		AAAAAAAAA
37	RUDDER TRIM CONTROL SWITCH	14331	FCA	FCA	5	
37	RUDDER TRIM TAB ACTUATOR	14323	FCA	FCA	5	
37	RUDDER TRIM TAB ASSEMBLY	14322	FCA	FCA	1	
37	PITCH CONTROL		FCA	FCA		0AAAAAAAA0
37	LEFT ELEVATOR POSITIONED		FCA	FCA		555555555

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37	LEFT ELEVATOR TORQUE TUBE	14217	FDAU	FDA	5
37	LEFT ELEVATOR HINGE 3 EA	14214	FDAV	FDA	5
37	LEFT ELEVATOR SKIN	14213	FDAW	FDA	0
37	LEFT ELEVATOR FRAME / RIBS	14212	FDAX	FDA	0
37	LEFT ELEVATOR ASSEMBLY	14211	FDAY	FDA	5
T37	LEFT ELEVATOR TIP	1421A	FDAZ	FDA	0
37	RIGHT ELEVATOR POSITIONED		FDB	FD	555555555
37	RIGHT ELEVATOR TORQUE TUBE	14217	FDBU	FDB	5
37	RIGHT ELEVATOR HINGE 3EA	14214	FDBV	FDB	5
37	RIGHT ELEVATOR SKIN	14213	FDBW	FDB	0
37	RIGHT ELEVATOR FRAME/RIBS	14212	FDBX	FDB	0
37	RIGHT ELEVATOR ASSEMBLY	14211	FDBY	FDB	5
T37	RIGHT ELEVATOR TIP	1421A	FDBZ	FDB	0
37	ELEVATOR CONTROL MOTION		FDC	FD	SAAAAAAAAAA
37	ELEVATOR CONTROL MOTION		FDC	FDA	FAAAAAAAAAA
37	ELEVATOR CONTROL MOTION		FDC	FDB	FAAAAAAAAAA
37	ELEVATOR DOWNSPRING	14223	FDCV	FDC	2
37	ELEVATOR PUSH PULL RODS	14222	FDCW	FDC	2
37	ELEVATOR QUADRANT 2EA	14218	FDCX	FDC	2
37	ELEVATOR CABLE	14215	FDCY	FDC	5
37	ELEVATOR CABLE PULLEY 14EA	14216	FDCZ	FDC	2
37	CONTROL STICK DISPLACEMENT		FDE	FDC	AAAAAAAAA
37	CONTROL STICK DISPLACEMENT		FDE	FEFD	FAAAAAAAAAA
37	LEFT STICK CONTROL		FDEA	FOE	111111111
37	LEFT STICK CONTROLLED		FDEA	FDE	H 999999999
37	LEFT STICK GRIP	1411A	FOEAV	FOEA	0
37	LEFT STICK TO R LINKAGE	14115	FOEAW	FOEA	2
37	LEFT STICK YOKE STICK	14116	FOEAX	FOEA	2
37	LEFT STICK YOKE BEARING	1412B	FOEAY	FOEA	0
37	LEFT STICK YOKE	1412A	FOEAZ	FOEA	5
37	RIGHT STICK CONTROL		FDEB	FDE	111111111
37	RIGHT STICK GRIP	1411A	FDEBV	FDEB	0
37	RIGHT STICK TO LEFT LINK	14115	FDEBW	FDEB	2
37	RIGHT STICK YOKE STICK	14116	FDEBX	FDEH	2
37	RIGHT STICK YOKE BEARING	1412B	FDEBY	FDEB	0
37	RIGHT STICK YOKE	1412A	FDEBZ	FDEB	5
37	CONTROL STICK LINKAGE	14221	FDEZ	FDE	8
37	PILOT ACTION		FDF	FDE	FAAAAAAAAAA
37	PILOT ACTION		FDF	FDTB	AAAAAAAAA
37	PITCH TRIM ACTUATION		FDT	FD	000000000
37	PITCH TRIM ACTUATION		FDT	FDTC	FAAAAAAAAAA
37	MOTION TRANSMITTED		FDTA	FDT	AAAAAAAAA
37	PITCH TRIM TRAVEL STOP	614226	FDTAX	FDTA	2
37	PITCH TRIM CIRCUIT BREAK	14232	FDTAY	FDTA	5
37	PITCH TRIM MOTOR	14233	FDTAZ	FDTA	7
37	PITCH TRIM INITIATED		FDTB	FDTA	AAAAAAAAA
37	PITCH TRIM CONTROL SWITCH	14231	FDTBZ	FDTB	5
37	PITCH TRIM STATUS INDCTED		FDTC	DC	I FDT 010000000
37	PITCH TRIM STATUS INDCTED		FDTC	FDF	F010000000
T37	PITCH TRIM STATUS LIGHT	9944A	FDTCY	FDTC	A

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A37	ANUNCIATOR PANEL	4431A	FDT CZ	FDT C	A
37	PITCH TRIM PUSH PULL ROD	14222	FDTV	FDTA	2
37	PITCH TRIM HORN	14227	FDTW	FDT	5
37	PITCH TRIM SCREW JACK	1422A	FDTX	FDT	5
37	PITCH TRIM ACTUATING MECH	14225	FDTY	FDT	5
37	PITCH TRIM TAB ASSY	14224	FDTZ	FDT	2
37	ROLL CONTROL		FE	F	OAAAAAAAAA
37	AILERON POSITION		FEB	FE	AAAAAAAAAA
37	LEFT AILERON POSITION		FEB A	FEB	11111111
37	AILERON QUADRANT	14121	FEBAT	FEB A	5
37	AILERON LINKAGE	14115	FEB AU	FEB A	5
37	AILERON HINGE PIN	14114	FEB AV	FEB A	5
37	AILERON SKIN LEFT	14113	FEB AW	FEB A	0
37	AILERON FRAME LEFT	14112	FEB AX	FEB A	0
37	AILERON ASSY LEFT	14111	FEB AY	FEB A	8
37	AILERON CABLE PULLEY 10E14118		FEB AZ	FEB A	2
37	RIGHT AILERON POSITION		FEB B	FEB	11111111
37	RIGHT AILERON QUADRANT	14121	FEB BT	FEB B	5
37	RIGHT AILERON LINKAGE	14115	FEB BU	FEB B	5
37	RIGHT AILERON HINGE PIN	14114	FEB BV	FEB B	5
37	RIGHT AILERON SKIN	14113	FEB BW	FEB B	0
37	RIGHT AILERON FRAME	14112	FEB BX	FEB B	0
37	RIGHT AILERON ASSY	14111	FEB BY	FEB B	8
37	AILERON CABLE PULLEY 10EA14118		FEB BZ	FEB B	2
37	LEFT AILERON ACTUATION		FEB C	FEB A	AAAAAAAAAA
A37	L SLOT LIP SPOILER ACTUATOR	14821	FEB CR	FEB C	0
A37	L SLOT LIP SPOILER LINKAGE	14812	FEB CS	FEB C	0
A37	L SLOT LIP SPOILER ASSY	14811	FEB CT	FEB C	0
A37	ACTUATING MECHANISM	1412C	FEB CU	FEB C	0
A37	BOOST TAB DAMPER	14120	FEB CV	FEB C	0
A37	LEFT AILERON BOOST TAB	14127	FEB CW	FEB C	0
37	LEFT AILERON CABLE	14117	FEB CX	FEB C	5
37	LEFT AILERON PUSH PULL ROD	14123	FEB CY	FEB C	5
37	LEFT AILERON BELL CRANK	14122	FEB CZ	FEB C	5
37	RIGHT AILERON ACTUATION		FEB D	FEB B	AAAAAAAAAA
A37	R SLOT LIP SPOILER ACTUATOR	14821	FEB DR	FEB D	0
A37	R SLOT LIP SPOILER LINKAGE	14812	FEB DS	FEB D	0
A37	R SLOT LIP SPOILER ASSY	14811	FEB DT	FEB D	0
A37	ACTUATING MECHANISM	1412C	FEB DU	FEB D	0
A37	BOOST TAB DAMPER	14120	FEB DV	FEB D	0
A37	RIGHT AILERON BOOST TAB	14127	FEB DW	FEB D	0
37	RIGHT AILERON CABLE	14117	FEB DX	FEB D	5
37	RIGHT AILERON PUSH PULL ROD	14123	FEB DY	FEB D	5
37	RIGHT AILERON BELL CRANK	14122	FEB DZ	FEB D	5
37	CONTROL STICK DISPLACEMENT		FEC	FEB	SAAAAAAAAAA
37	CONTROL STICK DISPLACEMENT		FEC	FEB C	FAAAAAAAAAA
37	CONTROL STICK DISPLACEMENT		FEC	FEB D	FAAAAAAAAAA
37	CONTROL STICK DISPLACEMENT		FEC	FEB D	FAAAAAAAAAA
37	LEFT STICK CONTROLLED		FEDA	FEC	11111111
37	LEFT STICK CONTROLLED		FEDA	FEC H	99999999

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A37	LEFT STICK DAMPER LEVER	1412E	FEDAT	FEDA	0	
A37	LEFT STICK DAMPER LINK	1412F	FEDAU	FEDA	0	
37	LEFT STICK GRIP	1411A	FEDAV	FEDA	0	
37	LEFT STICK CONTROL STICK	14116	FEDAX	FEDA	2	
37	LEFT STICK YOKE BEARING	1412B	FEDAY	FEDA	0	
37	LEFT STICK YOKE	1412A	FEDAZ	FEDA	5	
37	RIGHT STICK CONTROLLED		FEDB	FEC		111111111
A37	RIGHT STICK DAMPER LEVER	1412E	FEDBT	FEDB	0	
A37	RIGHT STICK DAMPER LINK	1412F	FEDBU	FEDB	0	
37	RIGHT STICK GRIP	1411A	FEDBV	FEDB	0	
37	RIGHT STICK TO LEFT LINK	14115	FEDBW	FEDB	A	
37	RIGHT STICK CONTROL STICK	14116	FEDBX	FEDB	2	
37	RIGHT STICK YOKE BEARING	1412B	FEDBY	FEDB	0	
37	RIGHT STICK YOKE	1412A	FEDBZ	FEDB	5	
A37	PITCH/ROLL HARMONIZATION		FEFD	FD		000000000
A37	PITCH/ROLL HARMONIZATION		FEFD	FE		000000000
A37	BOB WEIGHT	1421A	FEFDA	FEFD	5	
37	ROLL TRIM		FET	FE		000000000
37	TRIM TAB ACTUATING MECH	14125	FETAX	FET	3	
37	TRIM TAB ARM ASSY	14128	FETAY	FET	5	
37	TRIM TAB TRAVEL STOP	14126	FETAZ	FET	0	
37	ROLL TRIM CIRCUIT BREAKER	14132	FETBY	FET	5	
37	ROLL TRIM ACTUATOR MOTOR	14133	FETBZ	FET	8	
37	ROLL TRIM CONTROL SWITCH	14131	FETCZ	FET	5	
37	TRIM TAB ASSEMBLY	14124	FETZ	FET	5	
37	FLIGHT SPEED ATTENUATION		FX	F		000010110
37	GROUND CONTROL		G			AAAAAAAAA
37	SPEED CONTROLLED		GA	C		0000000A0
37	SPEED CONTROLLED		GA	GAX		500000005
37	SPEED CONTROL ATTENUATION		GAX	G		111111111
37	DIRECTIONAL CONTROL		GB	G		110000011
37	NOSE WHEEL STEER ACTUATED		GBAA	GBB		AAAAAAAAA
37	CAM	13517	GBAAW	GBAA	2	
37	PUSH.ROD	13516	GBAAX	GBAA	5	
37	CONTROL CABLE 32EAK	13514	GBAAY	GBAA	2	
37	CONNECTING ROD	13512	GBAAZ	GBAA	5	
37	STEERING COMMANDS INPUT		GBAB	GBAA		AAAAAAAAA
37	NOSE WHEEL STEERING ENABLED		GBAC	GBAA		AAAAAAAAA
37	HYD SWIVEL FITTING	13526	GBACS	GBAC	5	
37	TWO-WAY RESTRICTOR	13524	GBACT	GBAC	2	
37	HYD SHUTOFF VALVE	13523	GBACU	GBAC	8	
37	CIRCUIT BREAKER	13532	GBACV	GBAC	A	
37	NOSE WHEEL STEP SWITCH	13533	GBACW	GBAC	8	
37	SPEED BRAKE PRIORITY VALVE	14528	GBACX	GBAC	1	
37	NOSE GEAR SAFETY SWITCH	13233	GBACY	GBAC	A	
37	STEERING ENGAGE SW. 2EA	9913A	GRACZ	GBAC	2	
37	PILOT STEERING ACTION		GBAD	GBAB		111111111
37	PILOT STEERING ACTION		GBAD	GBAE		AAAAAAAAA
37	BUNGE	14326	GBADW	GBAD	0	
37	PEDAL SUPPORT	14328	GBADX	GBAD	5	

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
37 PEDALS 2EA 13412 GBADY GBAD 2
37 STEERING BELL CRANK 13518 GBADZ GBAD 5
37 CO-PILOT STEERING ACTION GBAE GBAB 11111111
37 BUNGEE 14326 GBAEW GBAE 0
37 PEDAL SUPPORT 14328 GBAEX GBAE 5
37 PEDAL 2 EA. 13412 GBAEY GBAE 2
37 STEERING BELLCRANK 13518 GBAEZ GBAE 5
A37 NOSE WHEEL STEERING EMPLOYD GBB GB GBA 25111111
T37 NOSE WHEEL STEERING EMPLOYD GBB GB GBA 11111111
37 NOSE WHEEL STEER COLLAR 13515 GBBG GBB A
37 NOSE WHEEL CENTER SPRING 13513 GBBT GBB 0
37 NOSE WHEEL TIRE 13722 GBBU GBB 2
37 NOSE WHEEL 13712 GBBV GBB 5
37 NOSE GEAR STRUT 13212 GBBW GBB 5
37 NOSE GEAR ASSEMBLY 13211 GBBX GBB 8
37 NOSE WHEEL STEERING ASSY 13511 GBBY GBB 5
37 NOSE WHEEL STEERING VALVE 13525 GBBZ GBB 8
A37 DIFFERENTIAL BRAKING GBC GB 210000000
37 DIFFERENTIAL BRAKING GBC GB K GBB AAAAAAAAAA
37 NOSE WHEEL SHIMMY DAMPED GBD GB 011111110
37 NOSE WHEEL SHIMMY DAMPED GBD GBB FAAAAAAAAA
37 PRESSURE COMPENSATOR 13522 GBDY GBD 2
37 NOSE WHEEL STEER VALVE 13525 GBDZ GBD 8
37 WHEEL BRAKES APPLIED GC GA 888888888
37 WHEEL BRAKES APPLIED GC GBC AAAAAAAAAA
37 LEFT WHEEL BRAKES APPLIED GCA GC AAAAAAAAAA
T37 BRAKE TORQUE FLANGE 2EA 13414 GCAV GCA 5
T37 ADAPTOR PLATE 13417 GCAW GCA 2
T37 BRAKE STATOR 13416 GCAX GCA 5
T37 BRAKE DISC 13415 GCAY GCA 5
37 BRAKE ASSEMBLY 13411 GCAZ GCA 8
37 RIGHT WHEEL BRAKES APPLIED GCB GC AAAAAAAAAA
T37 BRAKE TORQUE FLANGE 2EA 13414 GCBV GCB 5
T37 BRAKE ADAPTOR PLATE 13417 GCHW GCB 2
T37 BRAKE STATOR 13416 GCBX GCB 5
T37 BRAKE DISC 13415 GCBY GCB 5
37 BRAKE ASSEMBLY 13411 GCBZ GCB 8
37 LEFT BRAKE ACTUATION GCE GCA AAAAAAAAAA
37 RIGHT BRAKE ACTUATION GCF GCB AAAAAAAAAA
37 HYDRAULIC FORCE TRANSFER GCG GC SAAAAAAAAA
37 HYDRAULIC FORCE TRANSFER GCG GCE FAAAAAAAAA
37 HYDRAULIC FORCE TRANSFER GCG GCF FAAAAAAAAA
37 HYDRAULIC XFER VALVE 2EA 13424 GCGZ GCG 2
37 LEFT HYDRAULIC PRESS XMIT GCH GCG 11111111
37 LEFT HYDRAULIC PRESS XMIT GCH GCG H AAAAAAAAAA
37 HYD. SWIVEL FITTING 13427 GCHY GCH 5
37 HYD. BLEED VALVE 2EA 13425 GCHZ GCH 5
37 RIGHT HYDRAULIC PRESS XMIT GCJ GCG 11111111
37 HYD. SWIVEL FITTING 13427 GCJY GCJ 5
37 HYD. BLEED VALVE 2 EA 13425 GCJZ GCJ 5

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
37 LEFT MECH TO HYD CONVERSION GCK GCH AAAAAAAAAA
37 BRAKE CONTROL UNIT 2EA 13421 GCKZ GCK 5
37 RIGHT MECH TO HYD CONVERSION GCL GCJ AAAAAAAAAA
37 BRAKE CONTROL UNIT 2EA 13421 GCLZ GCL 5
37 PARKING BRAKE GCW GA 000000000
37 PILOT BRAKE COMMAND INPUT GCWX GCK AAAAAAAAAA
37 BRAKE PEDAL BUNGEE 14326 GCWXW GCWX 0
37 BRAKE PEDAL SUPPORT 14328 GCWXX GCWX 5
37 BRAKE PEDAL LINKAGE 13413 GCWXY GCWX 5
37 BRAKE PEDAL 13412 GCWXZ GCWX 2
37 CO-PILOT BRAKE COMMAND GCWY GCL AAAAAAAAAA
37 BRAKE PEDAL BUNGEE 14326 GCWYW GCWY 0
37 BRAKE PEDAL SUPPORT 14328 GCWYX GCWY 5
37 BRAKE PEDAL LINKAGE 13413 GCWYY GCWY 5
37 BRAKE PEDAL 13412 GCWYZ GCWY 2
37 PARKING BRAKE VALVE 13426 GCWZ GCW A
37 LANDING GEAR L A A0000000A
37 LANDING GEAR EXTENSION LA 000000000
37 LG EXTEND MOTIVE FORCE LAA AAAAAAAAAA
37 LAND GEAR RETRACTION LB LX 010000000
37 NLG DOWN & LOCKED LC LA AAAAAAAAAA
37 NLG DOWN & LOCKED LC LSE FAAAAAAAAA
37 NLG EXTEND ACTUATION LCA LC AAAAAAAAAA
37 FILLER VALVE 1321A LCAU LCA 0
37 NG BUNGEE 13217 LCAV LCA 0
37 ACTUATING CYLINDER 13223 LCAW LCA 8
37 NLG TRUNNION 13218 LCAX LCA 5
37 TORQUE LINK 13214 LCAY LCA 2
37 ACTUATOR SPRING 13210 LCAZ LCA 5
37 NLG DOWNLOCK MECHANISM 13216 LCZ LC 7
37 NLG DOWN & LOCKED LD LA AAAAAAAAAA
37 NLG DOWN & LOCKED LD LSE FAAAAAAAAA
37 NLG ACTUATED LD LDA AAAAAAAAAA
37 ROD END 2EACH 13138 LDAU LDA 2
37 ACTUATING CYLINDER 2EACH 13135 LDAR LDA 8
37 NLG SUPPORT 2 EACH 13123 LDAS LLA 5
37 STRAP 2 EA 13122 LDAT LDA 0
37 TRUNNION NLG 2 EACH 13121 LDAU LDA 5
37 TORQUE TUBE 2 EACH 13118 LDAV LDA 2
37 BUNGEE 2 EACH 13117 LDAX LDA 0
37 BELLCRANKS 2 EA 13116 LDAX LDA 5
T37 RETRACT ARM 2 EACH 13115 LDAY LDA 0
37 TORQUE LINK 2 EACH 13113 LDAZ LDA 2
37 NLG DOOR OPEN LDH LD AAAAAAAAAA
37 NLG DOOR ACTUATION LDC LDH AAAAAAAAAA
A37 DOOR ACTUATING CYL SUPP 13130 LDOS LDC 5
A37 NLG DOOR ACT CYLINDER 2EA 1313A LDCT LDC 5
T37 NLG DOOR ACT CYLINDER 2EA 1313B LDCU LDC 5
37 NLG DOOR LINKAGE 2EACH 11228 LDCV LDC 5
37 NLG DOOR HINGE 2EACH 11223 LDCW LDC 2

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
37 STRUCTURE 2EACH 11222 LDCX LDC 2
37 DOOR ASSEMBLY 2EACH 11221 LDCY LDC 1
T37 ACTUATOR ARM 2EACH 11228 LDCZ LDC 5
37 EXTEND SEQUENCE CONTROL LDD LD AAAAAAAAAA
37 RETRACT SEQUENCE CONTROL LDD LDD FAAAAAAAAA
37 RETRACT SEQUENCE CONTROL LDD LDC FAAAAAAAAA
A37 FOUR WAY SEQUENCE VALVE 13133 LDDV LDD 8
37 SEQUENCE SWITCH 2EACH 13145 LDDW LDD 5
37 HYDRAULIC RESTRICTOR 2EA 13134 LDDX LDD 2
A37 SHUTOFF VALVE 2EACH 13137 LDDY LDD 5
T37 SHUTOFF VALVE 2EACH 1313A LDDZ LDD 5
37 RIGHT GEAR DOWNLOCK MECH 13126 LDY LD 7
37 LEFT GEAR DOWNLOCK MECH 13126 LOZ LU 7
37 NLG UP & LOCKED LE LB AAAAAAAAAA
37 NLG ACTUATION LEA LE AAAAAAAAAA
37 ACTUATING CYLINDER 13223 LEAV LEA 8
37 TRUNNION 13218 LEAW LEA 8
37 TORQUE LINK 13214 LEAX LEA 2
37 ACTUATOR SPRING 1321C LEAY LEA 5
37 BUNGEE 13217 LEAZ LEA 0
37 NLG UPLOCK MECHANISM 13215 LEZ LF 7
37 NLG UP & LOCKED LF LB AAAAAAAAAA
37 NLG ACTUATION LFA LF AAAAAAAAAA
37 NLG ROD END 2 EACH 13138 LFAQ LFA 2
37 NLG ACTUATING CYLINDER 2E 13135 LFAR LFA 8
37 NLG SUPPORT 2EACH 13123 LFAS LFA 5
37 NLG STRAP 2EACH 13122 LFAT LFA 0
37 TRUNNION 13121 LFAU LFA 5
37 TORQUE TUBE 13118 LFAV LFA 2
37 BUNGEE 13117 LFAW LFA 0
37 BELLCRANK 2 EACH 13116 LFAX LFA 5
T37 RETRACT ARM 2EACH 13115 LFAY LFA 5
37 NLG TORQUE LINK 2EACH 13113 LFAZ LFA 2
37 NLG DOOR CLOSED LFB LF AAAAAAAAAA
37 NLG DOOR CLOSE ACTUATION LFC LFB AAAAAAAAAA
A37 DOOR ACTUATING CYL SUPP 1313C LFCQ LFC 5
37 NLG DOOR UPLOCK LINK 13127 LFCR LFC 5
37 UPLOCK ROLLER 11224 LFCS LFC 2
A37 NLG DOOR ACTUATOR 2 EACH 1313A LFCT LFC 5
T37 NLG DOOR ACTUATOR 2 EACH 1313B LFCU LFC 5
T37 NLG DOOR LINKAGE 2 EACH 11228 LFCV LFC 5
T37 NLG DOOR HINGE 2 EACH 11223 LFCW LFC 2
T37 NLG DOOR STRUCTURE 2EA 11222 LFCX LFC 2
T37 DOOR ASSEMBLY 2EACH 11221 LFCY LFC 5
T37 ACTUATOR ARM 2EACH 11228 LFCZ LFC 5
37 RETRACT SEQUENCE CONTROL LFD LF AAAAAAAAAA
37 RETRACT SEQUENCE CONTROL LFD LFA FAAAAAAAAA
37 RETRACT SEQUENCE CONTROL LFD LFC FAAAAAAAAA
37 BUNGEE 11227 LFDV LFD 0
A37 FOUR WAY SEQUENCE VALVE 13133 LFDV LFD 8

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1234567890123456789012345678901234567890123456789012345678901234567890
37 SEQUENCE SWITCH 2EACH 13145 LFDW LFD 5
37 HYDRAULIC RESTRICTOR 2EA 13134 LFDX LFD 2
37 SEQUENCE SHUTOFF VALVE 2EA 13137 LFDY LFD 5
137 SEQUENCE SHUTOFF VALVE 2EA 1313A LFDZ LFD 5
37 MLG UPLOCK MECHANISM 2EA 13125 LFZ LF 7
37 PNEUMATIC EXTEND FORCE LG LAA K LH AAAAAAAAAA
37 PNEUMATIC EXTEND FORCE LG LCA FAAAAAAAAA
37 PNEUMATIC EXTEND FORCE LG LQA FAAAAAAAAA
37 PNEUMATIC DISTRIBUTION LGA LG AAAAAAAAAA
37 RELEASE HANDLE LINKAGE 13612 LGAS LGA 5
37 EMERGENCY RELEASE HANDLE 13611 LGAT LGA 2
37 PNEUMATIC AIR FILL VALVE 13623 LGAU LGA 1
37 PNEUMATIC AIR BOTTLE GAUGE 13622 LGAV LGA 0
37 PNEUMATIC AIR BOTTLE 13621 LGAW LGA 8
37 SHUT-OFF VALVE 13624 LGAX LGA 5
137 SWIVEL FITTING NW 13225 LGAY LGA 5
137 SWIVEL FITTING 2 EACH 13137 LGAZ LGA 5
37 SHUTTLE VALVE HYD NW 13224 LGY LG 8
37 SHUTTLE VALVES 2EACH MG 13136 LGZ LG 8
37 HYDRAULIC DISTRIBUTION LH LAA LG F111111111
37 HYDRAULIC DISTRIBUTION LH LCA FAAAAAAAAA
37 HYDRAULIC DISTRIBUTION LH LDD FAAAAAAAAA
37 HYDRAULIC DISTRIBUTION LH LEA FAAAAAAAAA
37 HYDRAULIC DISTRIBUTION LH LFD FAAAAAAAAA
37 HYDRAULIC DISTRIBUTION LH LHXX SC10000050
37 LG MODE SELECTED LHA LH AAAAAAAAAA
137 CONTROL HANDLE BOOT 13317 LHAF LHA 0
37 CIRCUIT BREAKER 13234 LHAS LHA 5
37 SAFETY SWITCH 13233 LHAT LHA 5
37 CONTROL HANDLE KNUB 13216 LHAU LHA 0
37 SELECTOR VALVE NG 13315 LHAV LHA 8
37 CONTROL LINKAGE 13314 LHAW LHA 2
37 BELL CRANK 13313 LHAX LHA 5
37 PUSH ROD 13312 LHAY LHA 2
37 LG CONTROL HANDLE 13311 LHAZ LHA 5
137 SWIVEL FITTING 13225 LHK LH 2
37 SHUTTLE VALVE NG 13224 LHS LH 2
137 SWIVEL FITTING 2EACH 13138 LHT LH 5
137 SWIVEL FITTING 2EACH 13137 LHU LH 5
37 SHUTTLE VALVE 2EACH 13136 LHV LH 2
37 RESTRICTOR 13222 LHW LH 1
37 CHECK VALVE 13221 LHX LH 0
37 HYDRAULIC ATTENUATION LHXX L SC10000010
37 RESTRICTOR 13132 LHY LH 1
37 CHECK VALVE 13131 LHZ LH C
37 ELECTRICAL DISTRIBUTION LJ LDD FAAAAAAAAA
37 ELECTRICAL DISTRIBUTION LJ LFD FAAAAAAAAA
37 LAND GEAR POWER DISTRIBUTION LJ LHXX SC10000050
37 SAFETY SWITCH MLG 13148 LJS LJ 0
37 CIRCUIT BREAKER MLG 13146 LJT LJ 5

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 CIRCUIT BREAKER NG 13234 LJ 5
37 MLG DOWNLOCK SWITCH 2 EA 13142 LJ 5
37 MLG UPLOCK SWITCH 2EA 13141 LJ 5
37 SAFETY SWITCH NG 13233 LJ 0
37 DOWNLOCK SWITCH NG 13232 LJ 5
37 UPLOCK GEAR SWITCH NG 13231 LJ 5
37 ROLLING SUPPORT LK 150000051
37 MLG HYD FILLER VALVE 2EA 13124 LKH 0
37 NOSE GEAR STRUT ASSY 13212 LKJ 2
37 NOSE GEAR ASSY 13211 LKK 5
T37 INNER TUBE 13723 LKL 0
37 TIRE NOSE GEAR 13722 LKM 3
37 TIRE MAIN GEAR 2 EACH 13721 LKN 5
37 RETAINING NUT 3EA 13715 LKP 2
37 SPACERS 2EA 13714 LKQ 0
37 WHEEL BEARING 3EA 13713 LKR 0
37 MAIN WHEEL 2 EACH 13711 LKS 2
37 NOSE WHEEL 13712 LKT 2
T37 MAIN WHEEL ALUMINUM 2EA 1371A LKU 2
37 DRAG BRACE NLG 13213 LKV 2
37 NLG SUPPORT 1321B LKW 5
37 LG SIDE BRACE 2EA 13114 LKX 1
37 LG STRUT ASSEMBLY 2EA 13112 LKY 1
37 LG ASSEMBLY 2EA 13111 LKZ 5
37 LANDING GEAR STATUS INDICAT LS 000000080
37 LG DOWNLOCK INDICATION LSA 111111111
A37 LG INDICATOR LITES 51411 LSAZ 1
T37 LG INDICATOR LITES 3EA 9913B LSAZ 1
37 LG UNSAFE AUDIO TONE LSA 533333333
37 THROTTLE LIMIT SWITCH 2 11632 LSV 5
37 AUDIO SILENCE SWITCH 13615 LSW 0
37 AUDIO SILENCE RELAY 13616 LSWX 0
37 AUDIO WARNING RELAY 13614 LSWY 5
37 AUDIO WARNING SIGNAL 13613 LSWZ 5
37 LG UNSAFE WARNING LIGHT LSC 111111111
37 WARNING LIGHT RELAY 13144 LSCY 5
37 WARNING LIGHT 13143 LSCZ 3
37 LG DOWNLOCK STATUS LSD SAAAAAAAAA
37 LG DOWNLOCK STATUS LSD FAAAAAAAAA
37 LG DOWNLOCK STATUS LSD FAAAAAAAAA
37 LG DOWNLOCK STATUS LSD FAAAAAAAAA
37 NLG DOWNLOCK SENSED LSE AAAAAAAAAA
37 NLG DOWNLOCK SWITCH 13232 LSEZ 2
37 MLG DOWNLOCK SENSED LSF AAAAAAAAAA
37 MLG DOWNLOCK SWITCH 2 EACH 13142 LSFZ 2
37 CIRCUIT BREAKER 42313 LSZ 5
37 LAND GEAR RETRACT ATTENUATE LX L 010000000
A37 MISSION SUPPORT M AAAAAAAAAA
A37 MISSION PERFORMANCE RECORD MA 000000000
A37 GUN/ROCKET ACTION RECORDED MAA 111111111

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1234567890123456789012345678901234567890123456789012345678901234567890
A37 BOARD ASSY 77216 77215 MAAU MAA 5
A37 BOARD ASSY 77215 77216 MAAV MAA 5
A37 COMPUTER 77214 MAAW MAA 2
A37 SENSOR 77213 MAAX MAA 5
A37 MAGAZINE 77212 MAAY MAA 2
A37 CAMERA BODY KD 17C 77211 MAAZ MAA 2
A37 ORDNANCE STRIKE RECORDED MAB MA 111111111
A37 CONNECTOR 77315 MABD MAB 5
A37 SENSOR ASSY 77314 MABE MAB 5
A37 COMPUTER ASSY 77313 MABF MAB 0
A37 INTERVALOMETER 77312 MABG MAB 0
A37 CONTROL SWITCH 77311 MABH MAB 5
A37 CIRCUIT BOARD ASSY 77118 MABJ MAB 5
A37 CAMERA CONTROL 77117 MABK MAB 5
A37 PROTECTIVE COVER 77116 MABL MAB 0
A37 LENS 77115 MABM MAB 8
A37 FILTER 77114 MABN MAB 1
A37 TRACK 77113 MABP MAB 0
A37 MOUNT 77112 MABQ MAB 2
A37 CAMERA BODY 77111 MABR MAB 8
A37 CIRCUIT BOARD KEEPER 77110 MABS MAB 0
A37 AEC BOARD ASSY 7711F MABT MAB 2
A37 SCAN DRIVE BOARD ASSY 7711E MABU MAB 0
A37 PANEL ASSY 7711D MABV MAB 2
A37 FILM MAGAZINE 7711C MABW MAB 5
A37 AEC ASSEMBLY 7711B MABX MAB 0
A37 MOTOR/GEAR ASSY 7711A MABY MAB 2
A37 K-18A STRIKE CAMERA 77110 MABZ MAB 8
A37 GUN CAMERA ACTIVATED MAC MAA 111111111
A37 CIRCUIT BREAKER 75216 MACW MAC 8
A37 CONNECTOR 75215 MACX MAC 2
A37 GUN CAMERA SWITCH 7521J MACZ MAC 5
A37 LDD SAFETY AMINTAINED MB M 110010011
A37 GUN GAS PURGED MBA MB 000050000
A37 GUN BLAST TUBE SEAL 12213 MBAX MBA A
A37 GUN BLAST TUBE ADAPTER 12212 MBAY MBA 5
A37 GUN BLAST TUBE 12211 MBAZ MBA 8
A37 NOSE GUN FIRED MBH MAA 111111111
A37 NOSE GUN FIRED MBH MBA FAAAAAAAAA
A37 FIRING SWITCH 75211 MBH2 MBH 5
A37 GUNS ENABLED M8C MBH AAAAAAAAAA
A37 GUNS ENABLED M8C MUF FAAAAAAAAA
A37 NG STEER SAFETY SWITCH 13233 M8CW M8C A
A37 NG STEER CKT BKR 13234 M8CX M8C A
A37 MASTER ARM SWITCH 7521C M8CY M8C 8
A37 MASTER GUN SWITCH 9975F M8CZ M8C 8
A37 NOSE GUN INTEGRITY MAINTND M8D M 500000000
A37 NOSE GUN INTEGRITY MAINTND M8D MBH 111111111
A37 BOLT SUB-ASSY 74AAC M8DE M8D 0
A37 TIMING PIN 74AAU M8DF M8D 0

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A37	BEARING	74AAT	MBDG	MBD	0
A37	BEARING	74AAS	MBDH	MBD	0
A37	HOUSING COVER	74AAR	MBDJ	MBD	0
A37	REAR SUPPORT	74AAQ	MBDK	MBD	0
A37	FRONT GEAR	74AAP	MBDL	MBD	0
A37	REAR GEAR	74AAN	MBDM	MBD	0
A37	GUN HOUSING	74AAM	MBDN	MBD	0
A37	SAFEING SECTOR	74AAL	MBDP	MBD	0
A37	KOTOR	74AAK	MBDQ	MBD	0
A37	GUIDE BAR	74AAJ	MBDR	MBD	0
A37	BARREL CLAMP	74AAH	MBDS	MBD	0
A37	REMOVEABLE TRACK	74AAG	MBDT	MBD	0
A37	HEAD BOLT	74AAF	MBDU	MBD	0
A37	FIRING PIN/SPRING SET	74AAE	MBDV	MBD	0
A37	BOLT BARREL CLAMP	74AAD	MBDW	MBD	0
A37	AMMUNITION SUPPLIED		MBDX	MBD	00000000
A37	MATCHED SUPPORT ASSY	74CAF	MBDXA	MBDX	0
A37	LOAD SHAFT BRACKET	74BAK	MBDXAT	MBDX	1
A37	SLOTTED DRIVE RING	74CAM	MBDXAU	MBDX	2
A37	SPUR DRIVE GEAR	74CAL	MBDXAV	MBDX	8
A37	TIMING RING ASSY	74CAK	MBDXAW	MBDX	8
A37	DRUM PARTITION ASSY	74CAJ	MBDXAX	MBDX	2
A37	INNER DRUM ASSY	74CAH	MBDXAY	MBDX	5
A37	MAIN ROUND GUIDE ASSY	74CAG	MBDXAZ	MBDX	5
A37	ROUND COUNTER ASSY	74CAE	MBDXB	MBDX	2
A37	ADJUSTING BALL	74CAD	MBDXC	MBDX	0
A37	LINK EJECTION CHUTE	74CAC	MBDXD	MBDX	5
A37	EJECTION CHUTE ASSY	74CAB	MBDXE	MBDX	8
A37	AFT GUN ARM	74CAA	MBDXF	MBDX	5
A37	EMPTY CARTRIDGE CONTAINER	74BAU	MBDXG	MBDX	0
A37	RELEASE PINS	74BAT	MBDXH	MBDX	0
A37	CLEARING SOLENOID ASSY	74BAS	MBDXJ	MBDX	2
A37	FEEDER ASSY	74BAR	MBDXK	MBDX	5
A37	DE-LINK LOADER ASSY	74BAQ	MBDXL	MBDX	2
A37	ELECTRIC DRIVE ASSY	74BAP	MBDXM	MBDX	5
A37	REFERENCE SIGNAL GENERATOR	74BAN	MBDXN	MBDX	8
A37	RECOIL ADAPTER	74BAM	MBDXP	MBDX	0
A37	AFT GUN SUPPORT	74BAL	MBDXQ	MBDX	5
A37	LOADER SHAFT	74BAJ	MBDXR	MBDX	5
A37	LOADER SHAFT BUSHING	74BAH	MBDXS	MBDX	0
A37	ELECTRIC CONTROL	74BAG	MBDXT	MBDX	5
A37	STORAGE BAG	74BAF	MBDXU	MBDX	2
A37	LOADING CRANK ASSY	74BAE	MBDXV	MBDX	5
A37	LOADING SECTOR	74BAD	MBDXW	MBDX	2
A37	SAFING PIN	74BAC	MBDXX	MBDX	0
A37	CABLE ASSY W2	74BAH	MBDXY	MBDX	1
A37	CABLE ASSY W1	74BAA	MBDXZ	MBDX	1
A37	BARREL 6 EA	74AAB	MBDY	MBD	0
A37	GUN GAU-28/A	74AAA	MBDZ	MBD	A
A37	INADVERTANT REL PREVENTED		MC	M	110000011

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FLIGHT SAFETY PREDICTION TECHNIQUE

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00000000111111112222222222333333333344444444445555555555666666666677777777778
12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 SUSPENSION INTEGRITY MAINT MCA MC 100000011
A37 RIGHT WING STORES SUSPEND MCAA MCA AAAAAA
A37 BOLTS 1131E MCAAV MCAA 1
A37 FAIRING 1131C MCAAW MCAA 0
A37 PYLON HOOKS 9975E MCAAX MCAA A
A37 SWAY BRACES 4EA 1131D MCAAY MCAA 2
A37 PYLONS 2 EACH 1131B MCAAZ MCAA 5
A37 LEFT WING STORES SUSPEND MCA MCA AAAAAA
A37 BOLTS 1131E MCAAV MCA 1
A37 FAIRING 1131C MCAW MCA 0
A37 PYLON HOOKS 9975E MCAV MCA A
A37 SWAY BRACES 4 EA 1131D MCAV MCA 2
A37 PYLONS 2 EACH 1131B MCAV MCA 5
A37 STORES MAN RELEASE LEVER 9975D MCAZ MCA A
A37 FIRE CIRCUITS DE-ENERGIZED MCB MC 100000011
A37 STORE RELEASE DISABLE MCB MCB 000000055
A37 MASTER ARM SWITCH 7521C MCHAZ MCB 8
A37 FIRE CIRCUITS DISABLED MCB MCB 500000055
A37 GROUND ARM SWITCH 9975C MCBZ MCB 5
A37 NG STEER SAFETY SWITCH 13233 MCBY MCB 5
A37 NG STEER CKT RKR 13234 MCBZ MCB 8
A37 AIRCRAFT STORES CONFIGURED MCD MCA 111111111
A37 AIRCRAFT STORES CONFIGURED MCD MCAA FAAAAA
A37 AIRCRAFT STORES CONFIGURED MCD MCAH FAAAAA
A37 SUU-11 POD GUNS CONFIGURED MCD MCD 111111111
A37 DRUM ASSEMBLY 74DAK MCDAR MCD 0
A37 SUPPORT 74DAJ MCDAS MCD 0
A37 RECOIL ADAPTER 74DAG MCDAT MCD 0
A37 BATTERY CONTROL 74DAF MCDAU MCD 0
A37 LOADER 74DAU MCDAW MCD 0
A37 FAIRINGS 74DAC MCDAX MCD 0
A37 BARREL 74DAB MCDAY MCD 0
A37 GUN 74DAA MCDAZ MCD 0
A37 RKT LAUNCHER CONFIGURED MCD MCD 111111111
A37 JUMPER CABLE 74EAH MCDBS MCD 0
A37 STRIKER POST 74EAG MCDRT MCD 0
A37 PIN SHORTING 74EAF MCDBU MCD 0
A37 GROUNDING BUTTON 74EAE MCDV MCD 0
A37 INTERVALOMETER 74EAD MCDW MCD 0
A37 LAU 59/A 74EAC MCDX MCD 5
A37 LAU 32/BA 74EAB MCDY MCD 5
A37 LAU 31A 74EAA MCDZ MCD 5
A37 BOMBS/DISPENSERS CONFIGURED MCD MCD 111111111
A37 CHANNEL 75113 MCDX MCD 5
A37 BOMB RACK 75112 MCDY MCD 5
A37 BK-37 BOMB CONTAINER 75111 MCDZ MCD 0
A37 FEEDER 74DAF MCDV MCD 0
A37 STORES RELEASED MD M 000000000
A37 NORMAL STORES RELEASE MDA MD 111111111
A37 NORMAL STORES RELEASE MDA MDX FAAAAA

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00000000C1111111112222222222333333333344444444445555555555666666666677777777778
12345678901234567890123456789012345678901234567890123456789012345678901234567890
A37 LIVE STORES FIRE/RELEASE                    MDAA                    MDA                    8888888888
A37 BOMB ARMING SWITCH                    9975A                    MDAAZ                    MDA                    5
A37 INERT STORE SEL JETTISON                    MDAB                    MDA                    111111111
A37 MODE SELECT SWITCH                    7521F                    MDABZ                    MDAB                    8
A37 RELEASE/FIRE COMMAND                    MDAC                    MAB                    FAAAAAAAAA
A37 RELEASE/FIRE COMMAND                    MDAC                    MDA                    AAAAAAAAAA
A37 FIRING SWITCH                    75211                    MDACZ                    MDAC                    8
A37 EMERGENCY RELEASE                    MDB                    FAB                    000000000
A37 EMERGENCY RELEASE                    MDB                    MD                    111111111
A37 STORES JETTISON INERT                    MDBA                    MB                    FAAAAAAAAA
A37 STORES JETTISON INERT                    MDBA                    MDB                    000000000
A37 BOMB RACK SOLENOIDS 4EA 9975B                    MDBAZ                    MDBA                    2
A37 EMER JETTISON COMMAND                    MDBB                    MDB                    AAAAAAAAAA
A37 SWITCH SALVO                    75312                    MDBBY                    MDHB                    5
A37 SWITCH IGNITION (SQUIB) 75311                    MDHBZ                    MDHB                    5
A37 STATIONS SELECTED                    MDC                    MDA                    AAAAAAAAAA
A37 SELECTOR SW                    75212                    MDCY                    MDC                    5
A37 PYLON FUNCTION SWITCH 8 7521G                    MDCZ                    MDC                    2
A37 RELEASE SEQUENCE SELECT                    MDE                    MDA                    111111111
A37 SEQUENCE RELAY                    75213                    MDEW                    MDE                    5
A37 MODE SELECT SWITCH                    7521F                    MDEX                    MDE                    5
A37 PROGRAM SWITCH                    7521E                    MDEY                    MDE                    5
A37 SEQUENCE SWITCH                    7521D                    MDEZ                    MDE                    5
A37 SUU-11 FIRED                    MDF                    MAA                    111111111
A37 MASTER GUN SWITCH                    9975F                    MDFU                    MDF                    8
A37 NG STEER SAFETY SWITCH                    13233                    MDFV                    MDF                    8
A37 NG STEER CKT BKR                    13234                    MDFW                    MDF                    8
A37 WING GUN SWITCH                    9975G                    MDFX                    MDF                    8
A37 MASTER ARM SWITCH                    7521C                    MDFY                    MDF                    8
A37 ARM OPERATIONS CONTROLLED                    MDG                    MCB                    FAAAAAAAAA
A37 ARM OPERATIONS CONTROLLED                    MDG                    MCB                    FAAAAAAAAA
A37 ARM OPERATIONS CONTROLLED                    MDG                    MDH                    AAAAAAAAAA
A37 ARM OPERATIONS CONTROLLED                    MDG                    MDX                    FAAAAAAAAA
A37 NG STEER CKT BKR                    13234                    MDG                    MDG                    8
A37 NG SAFETY SWITCH                    13233                    MDGW                    MDG                    5
A37 GUNS SIGHTED/CONTROLLED                    MDGX                    MAC                    AAAAAAAAAA
A37 GUNS SIGHTED/CONTROLLED                    MDGX                    MEB                    FAAAAAAAAA
A37 ROUNDS COUNTER                    74DAH                    MDGXU                    MDGX                    0
A37 ROUND COUNTER                    75313                    MDGXW                    MDGX                    0
A37 FIRING SWITCH                    75211                    MDGXX                    MDGX                    8
A37 SIGHT GUN                    74GAA                    MDGXY                    MDGX                    0
A37 NOSE GUN RATE SWITCH                    7521H                    MDGXZ                    MDGX                    0
A37 RESISTORS 5 EACH                    75214                    MDGY                    MDG                    2
A37 ARMNT CNTRL PANEL 7521B 7521A                    MDGZ                    MDG                    8
A37 ARMAMENT CONTROL PANEL                    7521B                    MDGZA                    MDG                    8
A37 LIVE STORES ENABLED                    MDH                    MDAA                    AAAAAAAAAA
A37 LIVE STORES ENABLED                    MDH                    MRC                    FAAAAAAAAA
A37 MASTER ARM SWITCH                    7521C                    MDHZ                    MDH                    A
A37 ARM STORES STATUS DISPLAY                    MDX                    DB                    111111111
37 MAIN INVERT RELAY OPERATIVE                    UAAM                    UAHE                    UAAS                    111111111

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1234567890123456789012345678901234567890123456789012345678901234567890
37 MAIN INVERTER RELAY 42221 UAAMZ UAAM 8
37 AUX INVERT RELAY OPERATIVE UAAR UAAS 11111111
37 INVERTER RELAY 42221 UAARZ UAAR 5
37 SPARE INVERT RELAY OPERATV UAAS UAHE K UAAM AAAAAAAAAA
37 SPARE INVERT RELAY OPERATV UAAS UAAB K UAAP AAAAAAAAAA
37 INVERTER RELAY 42221 UAASZ UAAS 5
37 INVERTERS CONTROLLED UAAX UAAM FAAAAAAAAA
37 INVERTERS CONT UAAX UAAR FAAAAAAAAA
37 INVERTERS CONTROLLED UAAX UAAS FAAAAAAAAA
37 INVERTERS CONTROLLED UAAX UAAB SAAAAAAAAA
37 INVERTER SWITCH 42233 UAAXZ UAAX 8
T37 AC POWER DISTRIBUTED UAAB BBUX FAAAAAAAAA
T37 AC POWER DISTRIBUTED UAAB BDX AAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB BDX 11111111
A37 AC POWER DISTRIBUTED UAAB BFAX F11111111
T37 AC POWER DISTRIBUTED UAAB BFE FAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB BFG 11111111
T37 AC POWER DISTRIBUTED UAAB BFL S11111111
T37 AC POWER DISTRIBUTED UAAB BFM F11111111
T37 AC POWER DISTRIBUTED UAAB BFN F11111111
A37 AC POWER DISTRIBUTED UAAB BFSA AAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB BFWB AAAAAAAAAA
T37 AC POWER DISTRIBUTED UAAB BFXV F11111111
A37 AC POWER DISTRIBUTED UAAB BMAE AAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB CMAE AAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB CNBA AAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB CNBG FAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB CNHF FAAAAAAAAA
T37 ELECTRIC POWER UAAB CNTG AAAAAAAAAA
T37 ELECTRIC POWER UAAB CNTG AAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB CRB AAAAAAAAAA
T37 AC POWER DISTRIBUTED UAAB CT AAAAAAAAAA
37 AC POWER DISTRIBUTED UAAB DAB SAAAAAAAAA
37 AC POWER DISTRIBUTED UAAB DABA FAAAAAAAAA
37 AC POWER DISTRIBUTED UAAB DABB FAAAAAAAAA
37 AC POWER DISTRIBUTED UAAB EAAD 11111111
37 AC POWER DISTRIBUTED UAAB FAL AAAAAAAAAA
A37 AC POWER DISTRIBUTED UAAB FCC AAAAAAAAAA
37 MAIN INVERTER OPERATIVE UAAB UAABD 11111111
37 CIRCUIT BREAKER 42313 UAABX UAAB 2
T37 MAIN INVERTER 42123 UAABY UAAB 8
A37 MAIN INVERTER 42121 UAABZ UAAB 8
37 AUX INVERTER OPERATIVE UAAB K UAABE AAAAAAAAAA
37 CIRCUIT BREAKER 42313 UAABX UAAB 2
T37 STANDBY INVERTER 42124 UAABY UAAB 8
A37 STANDBY INVERTER 42122 UAABZ UAAB 8
T37 DC POWER DISTRIBUTED UDA BBD AAAAAAAAAA
T37 DC POWER DISTRIBUTED UDA BBC FAAAAAAAAA
T37 DC POWER DISTRIBUTED UDA BDD FAAAAAAAAA
A37 DC POWER DISTRIBUTED UDA BDD FAAAAAAAAA

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0000000011111111112222222222333333333344444444445555555555666666666677777777778					
12345678901234567890123456789012345678901234567890123456789012345678901234567890					
A37	DC POWER DISTRIBUTED	UDA	BDE	F22222222	
T37	DC POWER DISTRIBUTED	UDA	BDE	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	BEF	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	BF	FOOOOOCOC	
A37	DC POWER DISTRIBUTED	UDA	BFCB	FAAAAAAAAAA	
T37	DC POWER DISTRIBUTED	UDA	BFH	F11111111	
A37	DC POWER DISTRIBUTED	UDA	BFV	AAAAAAAAAAA	
T37	DC POWER DISTRIBUTED	UDA	BFX	AAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	BMA	AAAAAAAAAAA	
A37	INLET SCREEN ELECTRIC PWR	UDA	BZ	AAAAAAAAAAA	
A37	DC POWER DIST	UDA	CCB	SAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CCBA	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CCBB	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CCC	AAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CNH	SAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CNBO	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CNBG	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CNEA	FAAAAAAAAAA	
T37	ELECTRIC POWER	UDA	CNTB	AAAAAAAAAAA	
T37	ELECTRIC POWER	UDA	CNTG	AAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CR	SAAAAAAAAAA	
T37	DC POWER DISTRIBUTED	UDA	CK	AAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CKA	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	CRB	FAAAAAAAAAA	
T37	DC POWER DISTRIBUTED	UDA	CT	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	DABL	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	DAGA	AAAAAAAAAAA	
37	FIRE WARNING POWER	UDA	DCA	AAAAAAAAAAA	
T37	COCKPIT WARNING POWER	UDA	DCU	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EADU	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EAO	SAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EADA	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EAG	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EADJ	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EADK	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EADM	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EBBA	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EBBB	AAAAAAAAAAA	
T37	DC POWER DISTRIBUTED	UDA	EBBC	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EBBD	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EBBE	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EBBF	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	EBBT	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	ECA	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	FAKE	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	FAS	AAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	FB	SAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	FBAE	FAAAAAAAAAA	
37	DC POWER DISTRIBUTED	UDA	FBC	FAAAAAAAAAA	
A37	DC POWER DISTRIBUTED	UDA	FCCC	AAAAAAAAAAA	

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0000000001111111112222222222333333333344444444445555555555666666666677777777778
12345678901234567890123456789012345678901234567890123456789012345678901234567890
37      DC POWER DISTRIBUTED      UDA      FCTB      AAAAAAAAAA
37      DC POWER DISTRIBUTED      UDA      FCT      AAAAAAAAAA
37      DC POWER DISTRIBUTED      UDA      FCTC      AAAAAAAAAA
37      DC POWER DISTRIBUTED      UDA      FCT      AAAAAAAAAA
37      DC POWER DISTRIBUTED      UDA      GBAC      AAAAAAAAAA
37      DC POWER DISTRIBUTED      UDA      GBH      AAAAAAAAAA
37      DC POWER DISTRIBUTED      UDA      LB      C000000000
37      DC POWER DISTRIBUTED      UDA      LS      AAAAAAAAAA
A37     DC POWER DISTRIBUTED      UDA      MBH      AAAAAAAAAA
A37     DC POWER DISTRIBUTED      UDA      MDAC      AAAAAAAAAA
A37     DC POWER DISTRIBUTED      UDA      MGL      AAAAAAAAAA
A37     DC POWER DISTRIBUTED      UDA      MGF      AAAAAAAAAA
T37STARTER      42111      UDFA      BDE      A
T37STARTER      4211A      UDAFH      BDE      A
T37STARTER      4211B      UDAFC      BDE      A
T37STARTER      4211C      UDAFD      BDE      A
A37     BATTERY POWER SUPPLIED      UDB      MDE      AAAAAAAAAA
37      BATTERY POWER SUPPLIED      UDB      OFE      AAAAAAAAAA
37      EMERGENCY MODE SELECT      UDBA      OFE      AAAAAAAAAA
37      BATTERY SWITCH      42232      UDBAZ      UDRA      8
37      CONNECTORS      42118      UDBV      UDB      5
37      VENT TUBE      42117      UDBW      UDB      2
37      DRAIN VENT      42116      UDBX      UDB      2
A37     ENGINE START BUS OPERATIVE      UDBXX      EED      AAAAAAAAAA
37      ENGINE START BUS OPERATIVE      UDBXX      UDBZZ      AAAAAAAAAA
T37     ENGINE START BUS OPERATIVE      UDBXX      UDB      AAAAAAAAAA
37      10 AMP FUSE START BUS      42315      UDBXXW      UDBXX      5
A37     IGNITION SWITCH      42237      UDBXXX      UDBXX      8
37      STARTER RELAY      42213      UDBXXY      UDBXX      5
T37     IGNITION SWITCH      42236      UDBXXZ      UDBXX      8
T37     SUMP JAR      42115      UDRY      UDB      0
37      BATTERIES 2 EACH      42113      UDRZ      UDB      8
37      START VOLTAGE MONITORED      UDBZZ      UDX      111111111
37      VOLTMETER      9942A      UDBZZZ      UDBZZ      1
37      DC POWER DIST      UDC      UAAM      AAAAAAAAAA
37      DC POWER DIST      UDC      JAAR      AAAAAAAAAA
37      DC POWER DIST      UDC      UAAS      AAAAAAAAAA
37      DC POWER DIST      UDC      UABC      AAAAAAAAAA
37      DC POWER DIST      UDC      UDA      AAAAAAAAAA
37      RADIO INTERRUPT SW      4231A      UDCS      UDC      0
37      JUNCTION BOX      42312      UDCT      UDC      2
A37     BUS TIE RELAY      4231C      UDCU      UDC      8
A37     PARALLELING RELAY      4231E      UDCV      UDC      5
37      FUSE PANEL      42234      UDCW      UDC      2
37      EXTERNAL POWER RELAY      42214      UDCX      UDC      0
37      TERMINAL STRIP      42311      UDXY      UDC      0
37      EXT POWER RECEPTACLE      42112      UDCZ      UDC      0
37      EMERGENCY DC PWR SUPPLIED      UDE      UDC      K UDG      AAAAAAAAAA
37      BATTERY RELAY      42216      UDEZ      UDE      8
37      DC PWR GEN EA OF 2 ENGINES      UDG      UDBXX      UDBA      AAAAAAAAAA

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1234567890123456789012345678901234567890123456789012345678901234567890
37  DC PWR GEN EA OF 2 ENGINES          UDG          UDC          UDE  11111111
37  DC PWR GEN EA OF 2 ENGINES          UDG          UDGX         FAAAAAAAAA
T37 GENERATOR / STARTER 2EA 42118        UDGQ          5
37  STARTER SWITCH 42235                UDGR          2
T37 REVERSE CURRENT RELAY 42212          UUGS          5
A37 STARTER GENERATOR RELAY 42212        UUGT          5
37  STARTER RELAY 42213                 UDGU          5
T37 GENERATOR / STARTER 2EA 42111        UUGV          5
T37 GENERATOR / STARTER 2EA 4211C       UDGW          5
37  DC OUTPUT INDICATED                 UDGX          11111111
A37 TRANSFORMER 51512                   UDGXW         5
37  BALUM LIGHT 4221A                   UDGXX         2
37  LOADMETER RELAY 4231D               UDGXY         5
A37 SHUNT LOADMETER 4231B               UDGXZ         2
T37 GENERATOR / STARTER 2EA 4211A       UUGY          5
A37 GENERATOR / STARTER 2EA 42111       UUGZ          5
37  GEN CONTROL & REG EA OF 2          UDM           AAAAAAAAAA
A37 OVER VOLTAGE RELAY 4221B            UDMW          2
37  GENERATOR SWITCH 42231             UDMX          5
37  VOLTAGE REGULATOR 42211           UDMY          2
37  GENERATOR CONTROL RELAY 42215      UDMZ          8
37  PILOT ACTION UDX                   UAAX          FAAAAAAAAA
37  PILOT ACTION UDX                   UDBA          FAAAAAAAAA
37  PILOT ACTION UDX                   UDM           AAAAAAAAAA
A37 INLET SCREEN HYDRAULIC PWR          UHA           BZ           AAAAAAAAAA
37  HYDRAULIC POWER INPUT              UHA           FAF          AAAAAAAAAA
37  HYD PRESS DIST                     UHA           FBDC         AAAAAAAAAA
37  HYDRAULIC POWER                   UHA           GBAC         FAAAAAAAAA
37  HYDRAULIC POWER                   UHA           GBB          SAAAAAAAAA
37  HYDRAULIC POWER INPUT              UHA           GCC          AAAAAAAAAA
37  HYDRAULIC POWER INPUT              UHA           LH           AAAAAAAAAA
37  HYDRAULIC FILTRATION               UHAA          UHA           000000000
T37 RESTRICTOR FILTERS 45165            UHAAR         UHAA          1
T37 VENT FILTER ELEMENT 45164           UHAAS         UHAA          2
T37 VENT FILTER 45163                  UHAAT         UHAA          5
A37 RES VENT FILTER ELEMENT 45166       UHA AU        UHAA          2
A37 RES VENT FILTER 45165              UHA AV        UHAA          5
A37 LO PRESS FILTER ELEMENT 45164       UHA AW        UHAA          2
A37 LO PRESS FILTER 45163              UHA AX        UHAA          5
37  HI PRESS FILTER ELEMENT 45162       UHA AY        UHAA          2
37  HI PRESS FILTER 45161              UHA AZ        UHAA          5
37  HYD PRESS. EA OF 2 PUMPS            UHAB          UHA           11111111
37  HYDRAULI PRESSURE                  UHAB          UHAX         FAAAAAAAAA
A37 QUICK DISCONNECT 45124              UHABW         UHAB          1
A37 PUMP SUPPLY HOSE 45123              UHABX         UHAB          8
37  PUMP PRESS HOSE 45122              UHABY         UHAB          8
37  ENGINE DRIVEN PUMP 45121           UHABZ         UHAB          8
37  HYDRAULIC FLUID SUPPLIED            UHAC          AAAAAAAAAA
37  HYDRAULIC INTAKE ASSY 45117         UHACT         UHAC          2
37  HYDRAULIC FILLER SCREEN 45116      UHACU         UHAC          0

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PG0095.J1R1 DATE = 09/17/75

FLIGHT SAFETY PREDICTION TECHNIQUE

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12345678901234567890123456789012345678901234567890123456789012345678901234567890

37	HYDRAULIC FLUID DRAIN	45115	UHACV	UHAC	1
37	HYDRAULIC FLUID GUAGE	45114	UHACW	UHAC	0
37	HYDRAULIC FLUID VENT	45113	UHACX	UHAC	1
37	HYDRAULIC FLUID FILLER	45112	UHACY	UHAC	1
37	HYDRAULIC FLUID TANK	45111	UHACZ	UHAC	8
37	PRESSURE REGULATOR	45151	UHAP	UHA	2
A37	RETURN HOSE	45174	UHAQ	UHA	5
A37	PRESSURE HOSE	45173	UHAR	UHA	5
A37	RETURN LINE	45172	UHAS	UHA	5
A37	PRESSURE LINE	45171	UHAT	UHA	5
37	AUX POWER CNX	45146	UHAU	UHA	1
37	CHECK VALVE	45144	UHAV	UHA	1
37	RELIEF VALVE	45142	UHAN	UHA	1
37	HYD PRESSURE INDICATED		UHAX	UHA	1 UHAU AAAAAAAAAA
37	HYD PRESSURE INDICATER	51611	UHAXY	UHAX	7
37	HYD PRESSURE TRANSMITTER	51612	UHAXZ	UHAX	8
37	PRESSURE GAUGE	45132	UHAY	UHA	0
37	UTILITY ACCUMULATOR	45131	UHAZ	UHA	5

CARD COUNT IS 00002717. CARDS WITH ERRORS 0000000